CHRISTIAN THOUGHT.

LECTURES AND PAPERS ON

PHILOSOPHY,

CHRISTIAN EVIDENCE,

BIBLICAL ELUCIDATION.

SECOND SERIES.

EDITED BY

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CHRISTIAN THOUGHT.

NEW SERIES.

COUNTER-CURRENTS.

[A Lecture delivered before the Summer School of Christian Philosophy, Richfield Springs, N. Y., August 21st, 1883.]

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I AM going to consider some of the more pronounced tendencies of the thought and speculation of the time as they affect the interests of the Christian religion. Most of the limited time allowed me will probably be occupied, however, in trying to show how best and most wisely the Christian advocate may bear himself, in dealing with the new issues which the large, free intellectual activity of later years has created; or—more correctly speaking, perhaps—with old issues under the new aspects they have assumed within half a century.

The times are somewhat trying for the men that are "set for the defence of the Gospel" to-day, from the multiplied, novel, and mixed demands made upon them. No man feels more acutely, I suspect, the stress occasioned by the research and controversy of the time than the Christian apologist. Not one of the so-called "learned professions" requires for the worthy following of it such a wealth and variety of culture, or such a generosity and elasticity of sympathy, as that of which he is a member; since nearly all the lines of the higher controversies converge upon the apologist's position. He is in the set of all the intellectual currents that disturb the time. Other men may confine them-

selves to studies that range within more or less definite limits; but the theologian sits, so to speak, at the centre of innumerable *radii* which connect him with the circle embracing all sciences, any serious disturbance at any point of the periphery vibrating along the concentric lines, every tremor having a meaning for the theologian.

Men of a positive style of utterance are accustomed to characterize the age by the use of a single epithet. Ofttimes the hastily uttered verdict of some dominant creed or school, the epithet may represent nothing more than some unduly developed susceptibility in a man, or some favorite way of looking at things —some cast in the intellectual eye. But at best, such curt judgments, rarely resting on a sufficiently broad induction of facts, seldom commend themselves to men of large observation and discernment. It may be approximately just to pronounce of some past ages, that one was an age of Faith, and another an age of Credulity, and another an age of Unbelief; and that because human society in those times was comparatively simple in its structure and functions, so coming more readily and more completely under some one ruling inspiration. But certainly of our own age no such unqualified account can be given, and that because it is not simple, but marvellously complex. Surely if "the kingdom of God," or "the golden age," or the consummate civilization, is to come from the passing of the homogeneous into the heterogeneous, the good time cannot be far in the future, for the heterogeneous is already here in bewildering variety. Altogether a very trying time for intelligent, thoughtful Christian men, is the time in which our lot is cast. Not a placid, wrinkleless sea is the scene upon which the philosophic observer looks out to-day through the loop-holes of a meditative retreat, but a sea cut into furrows, by currents setting in strangely diverse directions.

In all spheres of thought and activity to-day, the old acquiescent or absolutely passive condition of temper which prevailed so long in Christendom, has given place to general unrest, with frequent occasions of conflict, between progressive instincts and energies and the repressive powers which long held those energies in check. The net result of the struggle at this hour, is a

very marked advance in liberty both of thought and action upon lines once prescribed by authority. With liberty so won, popular thought is not unnaturally somewhat wanton at times, or unduly glad of its emancipation; and being withal somewhat distracted, perhaps, by the rival voices that proffer it guidance. That a great deal of commotion would certainly ensue from the liberation of the human mind from a bondage that had long been hateful, might have been reasonably forecast. I am inclined to marvel myself, that the nations of Christendom submitted so long, to the coercion of the intellect in the name of Religion. We are frequently upbraided, I know, with the fact, that Christianity was the one stubborn hindrance all along to the attainment of mental freedom; in which accusation there is some show of truth, looking back to the doings of religious rulers for centuries in maintenance of what was called "the Faith." Yet may it fairly be claimed, I believe, that it was the religion of Christ, in asserting the rights of the individual conscience, and the direct responsibility of man to God, that eventually accomplished the great enfranchisement, other causes co-operating no doubt.

Hence the less implicit trust, in the world of common intelligence, in authorities once revered and feared, with more frequent demands for reasons to be rendered in support of doctrines once passively accepted, or in explanation of difficulties once never suspected by the popular mind; while in the world of disciplined, cultivated thought, discoveries have been made of the critical or scientific unsoundness of many of the positions and conclusions of theological orthodoxy. Hence the drift, of which we hear so much, away from old religious moorings; at which we need not be alarmed, however, since many of those moorings were frail things from the first, while others were very much worn when they yielded, by the friction of ages. Thus has it come to pass, that Christian apologists are so busy to-day in seeking new moorings for Faith, or in deciding which of those that still hold may be relied on in the increasing stress put upon them. And of that work the end is not yet, the task of adjusting the old Faith to the new Thought being a task full of difficulty; the apologetic art being largely a new thing to-day. Many of the old implements which some of us used in our professional child-

hood, are of little or no value now. It was once easy for men to appeal to the Church, as the keeper and interpreter of all necessary truth, when the world believed in the divine commission she professed to hold; but the Church herself requires a good deal of vindication to-day, with the light of historical criticism full upon her. The "verbal inspiration" of the Bible was another short cut to sound and reliable conclusions, for those accepting such claim in behalf of the Book; but by all men of intelligence that claim has been abandoned, I take it. The old orthodox psychology, again, which used to render it so very easy to prove the spirituality and immortality of the human soul, by hiding the conclusions desired in the definitions it laid down, is no longer available to the Christian metaphysician; while few men of any logical penetration will follow to-day the old circular argumentation, which cited the miracles of the Bible to prove the divine authority of the Book, and then used the authority in proof of the credibility of the miracles. The adversaries that confront us to-day, in brief, are not to be answered by the "Short and Easy Methods" once so implicitly relied on.

For the field of hottest debate between scepticism and Christian faith has shifted, from the sphere of historical testimony, and from ethical and metaphysical grounds, to the sphere of physical facts. For long the world was content to assume, that the powers and possibilities of matter were few and of very limited range. But to-day, there are men who tell us, as those having authority, that in the dull, passive stuff, as it is popularly esteemed, may be discerned "the promise and potency of every form and quality of life." Science, in brief, has very largely supplanted philosophy, accepting a well understood distinction between the two terms; which change has worked to the serious disadvantage of religious apologists, since they lack, as a rule, very naturally, the technical training and attainments to fit them to cope in controversy with scientific experts. Yet is there little that is essentially novel in the change, speculation and experiment having simply gone back into an old channel, or lines of research, for long almost wholly neglected, being resumed and followed with a passionate interest to-day. It is no sufficient answer, of course, to those who so eagerly and hopefully

pursue those lines, to say that the spirit and aim of their researches are old; since there is a great deal that is startlingly novel, in the results of the application of improved methods and of new implements by the science of our own time. Yet history acquaints us with fluctuations in intellectual aspiration as marked, and of a significance as threatening to spiritual truth, as the change that has created such a commotion within recent years; action and reaction, current and counter-current, having marked the whole course of philosophic speculation. The mythological conceits of the heroic age of Greek literature soon gave place, as we know, to conceptions of nature as complete in itself, or as having in it a "germ of life and a principle of organization." But the crude materialistic surmises of the Ionic school, were soon very generally supplanted by the extreme idealism of the Eleatics; who affirmed their faith in the existence of "a holy, ineffable spirit," outside of and above nature; of a divinity without beginning and without end. But then followed the reaction in which Democritus was a leader, towards a purely mechanical conception of nature, with its atomic activities, anticipating speculations with which we are familiar to-day. These mutually contradictory theories, again, gave rise to the contempt of the Sophists for all endeavors to find absolute truth, or to interpret the mysteries of nature; from which contempt philosophy was redeemed by Socrates and Plato and Aristotle, who very largely ruled the intellectual world for more than twenty centuries. Their empire was sometimes resisted. (I speak of the three as essentially one, in the witness each bore against the doctrines of empiricism; the "stout Stagirite," though laying more stress upon experience than Plato did, having been a spiritualist, as Hegel has shown,* and not a materialist, as once very generally represented.) Reactions of more or less force and compass ensued—currents setting back towards the conclusions of the earlier sensationalism; as, notably, in Epicureanism, so ably expounded for the Roman world in the "*De Rerum Natura*" of Lucretius; while tendencies sometimes showed themselves towards the extravagant scepticism of the Pyrrhonists. Predominantly, however, the principles and doctrines of Socratic philosophy, in the form

* See Lewes' "Hist. of Phil.," V. i., p. 247, Appleton's Ed.

which Aristotle gave to them, retained authority till long after the "Revival of Learning" in Europe; Gassendi, in the early part of the 17th century, being spoken of by Lange, in his recent "History of Materialism," as the first to restore, in a modified shape, the doctrines of the ancient atomists. After the great awakening of the human intellect from the slumber of the Middle Ages, occasions and causes conspired to turn research and study away very generally, from the frivolous subjects, or subjects inaccessible to reason, which had so largely occupied the schoolmen, towards matters of a terrestrial and tangible interest. Greek scholarship and literature were driven West by the inroads of Mohammedanism; schools increased; the printing press was at work; authority in matters of opinion was dethroned; men dared to think for themselves. Travel and astronomy corrected and enlarged men's conceptions of the world and the universe: Nature recovered the regard and homage of the observing and thoughtful; to interpret her forms and movements and mysteries became the one absorbing concern. Bacon formulated and proclaimed his method of induction—thought must find sanctions for its conclusions in facts, duly certified and discriminated. A strong tide of sensationalism thus set in. Des Cartes tried to mediate between sense and reason, finding a place for the claims of each in his dualism, but strongly asserting the supremacy of mind over matter; Spinoza reducing the two to one ineffable "substance." But Locke turned the current of thought again strongly towards sensationalism;* his doctrines invading the country of Des Cartes, culminating in the extreme sensualism of Condillac and Helvetius; from which degrading dominion Kant came to deliver thinking Europe—with whom this catalogue of alternations in speculation may end.

Meanwhile progress was rapid and real in knowledge of the subtle combinations of matter, and of the occult forces seemingly essentially of matter, mechanical discoveries having prepared the way for the microscopic study of nature; marvellous revelations following, of the intimate interdependence between life and the vast variety of material organisms through which life is manifested. That notion of *interdependence* between two distinct

* See Masson's "Recent Brit. Phil.," p. 157.

entities contented men for a time. But why allow any distinction? Why speak of *two* entities? Such questions hinted at conclusions with which we are all familiar now, viz.: that life—life in its widest and loftiest range—is nothing but functional activity, or the expression of force inherent in, or resulting from, the combination and impact of material particles!

Thus are the "atoms" of Leucippus and Democritus again in honor. Their descendants have returned to the task which Democritus left unaccomplished much better equipped for the work, however, than he ever was, in the possession of implements necessary for the nicer manipulations of nature, and from vast accumulations of experimental knowledge of which the first atomists never dreamed; the prediction being confidently put forth to-day, that all faith in mind, or spirit, as something distinct from, or of a nature essentially other than, the energy inherent in matter, will soon disappear from out the world of intelligent men and women! Yet will I take upon me to say, on the authority of the men who make the prediction, that not one hair's breadth of progress has hitherto been made towards the identification of mental and material phenomena. Molecular physics have revealed subtle interactions between elements in nature for long undiscriminated; yet are all such disclosures nothing more than an enlargement of our knowledge of modes of operation. The expectation of the materialist to-day rests mainly upon the promise that physiology holds out, from the closer acquaintance it has made with the human nervous organism. Yet, "could we turn man's body into a transparent case, and compel powerful magnifiers to lay bare to us all that happens in his nerves and brain, what we should see, would not be sensation, thought, affection, but some form of movement simply, or other visible change," which we might proceed to note down "in parallelism with the corresponding order of the series known to self-consciousness;" but all that would contribute absolutely nothing towards abolishing the distinction now recognized between the two classes of phenomena.* Scrutinize the collocation and interaction of spherules, corpuscles, molecules, atoms, in the

* "The chasm between the two classes of phenomena still remains intellectually impassable."—*Tyndall.*

make-up of man's material structure as we may, the forming and the informing energy ever escapes detection. There is something beneath phenomena of which science, as distinct from philosophy, can tell us nothing. Analysis conducts to "the unknown"—to that which is unknown, at least, to observation and experiment; Mr. Tyndall very frankly confessing the incompetence of his own school, to close the debate between spiritualism and materialism, with anything like an authoritative utterance adverse to the former; acknowledging that "the passage from the physics of the brain to the corresponding facts of consciousness is unthinkable." "Science is mute here," says the modern "master of words;" but, as if fearing an inference of a sort he would dislike, adding a suggestion in commendation of agnosticism. "If, then, the materialist is confounded, and science is dumb," continues the Professor, "who else is entitled to answer? to whom has the secret been revealed? Let us lower our heads and acknowledge our ignorance, one and all." Well, the attitude were becoming to the highest among us, while the confession were good for the wisest. But, unhappily, the irrepressibly inquisitive something within us, will not let us rest in the agnosticism so touchingly commended to our acceptance. The Positivist's advice to suppress all curiosity as to what may lie back of the order of visible facts, is simply exasperating to men of intellectual courage. As said Aristotle very wisely:—"We must philosophize; and if any man say we must not philosophize, yet in saying that he doth philosophize." Men have ever and everywhere asked, as they are asking to-day with increased persistence—Whence? Why? Whither? Positivism would have us content ourselves with settling the How of things. But to the extent that Positivism may prevail upon men to occupy themselves solely with asking and answering the question How, Science itself will stagnate and die. The How suggests the Whence, and the Whence suggests the Why, and the Why suggests the Whither; and so, the very disciples of Positivism snap the leash in which the leaders would hold them; and the harriers are out o'er the wide-spreading plains of philosophy, not even bating a breath at what the Positivist calls "the quagmires of metaphysics!" Yes, it is even so, let men lament it as they may. Physiology is the

pathway to psychology, into whose misty realm we must follow the problems which an empirical science suggests, but which it can never solve.

For though Science, as we are assured again and again, knows nothing of origins or of ultimate destinations, occupying herself solely with processes, yet will not her followers rest content within such restrictions; but will betake themselves to schools that busy themselves a great deal with questions as to origins and ends, presuming to dictate conclusions there, denouncing all prying into things beyond the scientific ken as useless or impertinent; all of which is very offensive in men of science, seeing that in their more candid moods they confess, that the explanations they have to offer of many matters within their own province are ofttimes far from conclusive, and remembering how largely they draw upon "the unknown" to eke out the account they give of the system of Nature. We are cautioned, I know, to "take science at her best" in judging her teachings. But how shall we decide between scientific authority in Haeckel, who postulates protoplasm as the only working power he needs to produce a universe, and the authority of Mr. Tyndall, who tells us, with the generality of geologists, that during a certain period of its history the earth was in a state unendurable to protoplasm? that fact requiring, of course, another working power to be postulated for the production of protoplasm. The difficulty is obvious, and very grave for the materialists. But Sir William Thompson comes to their relief with the somewhat startling suggestion, that protoplasm was imported into our world ready-made, on a meteoric stone; very much as pollen is carried by bees to sterile plants. Even thus was our previously lifeless globe first "fertilized!" Or how shall we reconcile, in trying to discover "science at her best," the spontaneous-generation assumptions of Bastian and Letourneau, with Mr. Huxley's confession that such assumptions are, as yet, scientifically groundless? Or in what estimate shall we hold Mr. Darwin's genesis of the conscience, Mr. Mivart denouncing the notion as an "absolute negation of reason," "resting not on evidence, but on ignorance?"—Science being supposed to be "at her best" in all these gentlemen. With some of the scribes, the extravagant ma-

terialism of Vogt and of Büchner is in credit, which Mr. Tyndall pronounces "too absurd to be entertained by any sane mind." The mechanical evolutionist asks for inconceivable millions of ages for the fiery atoms to accomplish the task they had before them, when first they began their dance in space; and Sir William Thompson answers, that Astronomy cannot grant the time required. The law of "Natural Selection" explains for the later Darwinian, the whole long mysterious advance of life, up from some simple germ, to the most highly differentiated spino-cerebral system; and Mr. Wallace, with Mr. Mivart, tells us, that the law of Natural Selection stops before it reaches man! The doctors differ: there is schism even in science! I say these things, not in derision; but only to show that there is a great deal of "unverified science" abroad to-day, as Prof. Virchow lately told us.

But belonging to a class to which our scientific Rabbis deny all right to speak upon these things, I will not farther presume in such direction; but will occupy myself for a while with the question, as to the attitude proper to be maintained by men of Christian convictions, in presence of the insurrection now raging against all spiritual truth.

And, in the first place, I may safely say, I think, that it were unwise to affect *indifference* toward it; following the heavenly vocation, as some advise us to do, in happy obliviousness to all that gainsayers are doing around us. That may be the prudent course for the many among us; but somebody must bear pertinent, and, if possible, effective, witness against the dominant heresies of the time. For no answer being attempted, the on-looking multitude will be apt to conclude that the heresies are unanswerable, to the immediate and serious discredit of all Christian faith, in which situation we have the *raison d'etre* of the "Institute of Christian Philosophy."

But let those who engage in the work of vindication, abstain from hastily imputing unwelcome conclusions of science to any sort of unworthy animus. Men of science have their *idola;* they are frequently hasty in drawing conclusions, suspense of judgment being irksome to men who make certainties the boast of their profession; while they are sometimes carried away by conceits.

But as a class, they are as free as any other, I believe, from all voluntarily harbored disposition to ignore or to trifle with the claims of truth. Of the best representatives, at least, it may fairly be said, I think, that they do not invent objections to received opinions, or propound anti-religious theories as if in wicked sport; they simply find occasions for such objections, and material for such theories, in the professional pathways they pursue; and it is therefore impertinent and offensive, to apply to such men the abusive epithets so often heard from Christian pulpits, or found in the "religious press." The approach towards a better understanding between men of faith and men of science—to adopt a common but uncritical classification—has been very much hindered hitherto by the intolerant temper of the former. The education, the mental atmosphere, an unreasoning reverence, an habitual resort to dogma, the pleasing conceit that he is a favorite with the Deity, having access to secrets denied to others—all these have been unfriendly to a large and liberal thought in the theologian. He has been, as a rule, therefore, a persistent foe to free inquiry, either as sinful in itself, or as perilous to faith and piety. Preferring safety in darkness to danger in the light, he has sedulously occupied himself in stopping every chink in his sanctum, through which a solitary unwelcome ray of the surrounding radiance might possibly find entrance. Such a spirit has been rapidly on the decline, however, of late; and hence increased respect in men of science for theologians.

Next, let it be said that Christian men feeling any concern about these things, should be on their guard against admitting the assumption, into which men of science would sometimes lure them, that this or that scientific conclusion is in deadly conflict with some essential article of Christian truth. A great deal of mischief has been wrought, I suspect, by the currency which certain catch phrases have had of late in the reading world; such as "the *antagonism* between science and religion." Whatever antagonism of the sort intended may actually exist to-day, were more fitly spoken of as existing between certain men representing science and some who represent religion, than between the systems themselves; such antagonism arising mainly, if not wholly, from an imperfect or confused apprehension of things, or

from an unskilful handling of evidence, or because we do not know enough of the matters—as Joseph Butler taught us to say—upon which we try our arts of reconciliation. Certainly the time is not here, for those arts to be so applied, that no occasion for dissension will ever again be encountered, in the vast domain over which religion and science have equal right to range.

But perhaps the most important counsel for the Christian apologist mid existing perplexities, is to warn him of the worthlessness of certain evasive arts very warmly commended sometimes in dealing with scientific scepticism; of which sort of evasion this is a sample:—"Let religion and science each follow its own way," it is said, "without interruption and without jealousy." Well-meant advice, perhaps, but utterly impracticable; since the way of science and the way of religion are not two parallel lines that may go on forever and never meet. They not only inevitably and frequently cross each other, but the two ways are for intervals often one; in which case the question of superior right of occupancy arises. It is foolish for theologians to plead, that they may be left in undisturbed possession of what they may deem their own peculiar postulates and principles; since the principles are not exclusively their own, while the postulates must submit to the scrutiny of a paganish logic. Or, as Mr. Maurice once somewhat caustically told them, they cannot "go out to parley with men of science with a white flag in their hand, saying: 'If you will let us alone, we will do the same by you. Keep to your own province, but do not enter ours. The reign of law which you proclaim, we admit—outside of these walls; but not within them. Let there be peace between us.'" That sort of amiable talk was once in fashion with a certain class of theologians; but seldom, or never at all, heard to-day from men of discernment.

Substantially the same plea is still put forth, however; generally assuming some such shape as this:—"The Bible was not given to teach science," 'tis said; "and those who accept the doctrines of the Holy Book, cannot fairly be summoned to plead, therefore, in the court to which science makes its appeals." There is a very fertile germ of truth in the proposition; yet must the argument as a whole be pronounced fallacious, I think. It

may be worth while to examine it somewhat closely, however, considering the fresh interest felt of late in what is called "the Bible question."

"The Bible was not given to teach science"—a proposition which some men repeat in a tone as if meaning to say, "*There's* an end of all controversy." Yet is it little more than a matter-of-course truism; the marvel being, that any one should ever have seriously supposed, that the teaching of science of any sort —in the sense we attach to the word to-day—was among the purposes contemplated in the gift of the Heavenly Oracles. Science is knowledge, sifted, certified, systematized, of the phenomena and functions of nature; which knowledge is, and has always been, necessarily progressive, up from the first impressions made upon unreasoning sensation, to the vast discoveries and inferences of the disciplined intellect. Estimated at any point in the development and progress of the human race, therefore, the knowledge of nature then in the possession of men, must needs have been relatively imperfect; and any record of such a progressive career, will necessarily bear witness to such imperfection. Now the Bible, incidentally at least, is such a record; which must needs have taken on the complexion of the times and conditions in and mid which its several sections were written. Only by the intrusion of causes that would have changed the whole economy of human probation, could one generation have anticipated the discoveries and achievements that were to come through the studies and struggles of a later. Light and inspiration for a life of which science knows nothing, came in other ways, no doubt. But only truth that man could never of himself have discovered was properly revealed: all other truth was left to come forth into view through the working of the ordinary laws of progress. So far then from the inaccurate science of the Bible—if anything of science, properly so called, can be found in the Book—being a just occasion for alarm to its friends, it should rather be held as a guarantee of the Bible's historical validity, coming as it does with the "image and superscription" upon it of the widely diversified times in which the several writers lived. It ought not to be counted a very unorthodox thing to say, therefore, that Moses, Jewish prophets,

or Christian apostles, were neither astronomers, nor geologists, nor physiologists, nor natural philosophers, beyond what their respective times admitted of. It is foolish in their disciples to prefer such claims, falling into a spasm of fear at everything that seems to discredit them. Such perturbations have been frequent in the course of the Christian ages, but after-generations have smiled at them.

But while the plea, "The Bible was not given to teach science," has truth of considerable consequence in it, the inference founded upon the statement is a glaring *non sequitur*. Believers in divine revelation may very fairly be called upon to show, how inaccurate statements of a scientific bearing in the Bible, can be reconciled with the demands commonly made in behalf of the Book as "inspired." We come upon questions very early in the sacred volume which impose such a task upon the expositor. The origin and evolution of things, for instance; the presence of death on our globe; the aboriginal unity or diversity of the human race; the myth, or the fact, of "the fall;" the origin and development of language; the phenomena of "the deluge"—to these and to all other such questions, the theologian must consent to plead in a mixed court, dealing with cold, passionless evidence; never stifling the utterance of honest conviction, nor trying to evade any legitimate inference, how adverse soever to traditional truth or to current creeds. For what if sentence should seemingly go against him? It will probably be found, if more closely looked into, that the verdict really lies against some theory which theology has imported into the Bible, rather than against anything the Bible itself has explicitly asserted.

Or what if some of its statements of a scientific import or implication should be found at fault? Let the theologian recall his own dictum—"The Bible was not given to teach science," cheerfully conceding all that such dictum logically requires to be conceded, and he may "possess his soul in peace" under all the assaults of his scientific adversary. He need not be nervously anxious then about the six "days," or six "cycles," of creation; or about the number of acres submerged by the deluge; or as to the cubic capacity of the ark; while, as to statements

against which criticism may make good its objections, he may be equally yielding, without fear of betraying the claims of the Bible to be a revelation from God. For say that we hold the Book to have consisted originally of the *ipsissima verba* of the Divine Author; yet can we not disguise the fact, that it was put into the world in such shape, and subjected to such conditions and contingencies, that absolute perfection cannot be claimed for the volume as we have it to-day. The mutabilities of time have left traces in it; scribes have imported "improvements" into it; while theological necessities have tempted men to tamper with its doctrinal teachings. Knowing and considering these things, no man of any moral nerve will be seriously concerned as to the precise force of every monosyllable in the divine documents, or as to the presence or absence of a cypher in certain numerical representations. "Let comfortable folk who know no sorrow," said a late magnanimous English scholar, "trouble their brains as to whether sixty, or six hundred, thousand fighting men came with Moses out of Egypt. We care not for numbers. What we care for is, not how many came out, but who brought them out."

Such an enlightened pliancy of mind must the Christian advocate exhibit to-day in debate with the scientist, or with the critic, never fearing that the faith of Christendom in the Gospel of Jesus Christ will be thereby imperilled. For both science and criticism have the right to be heard in the discussion and settlement of all questions of a mixed interest, so to speak. They cannot be excluded on the ground often assumed by apologists, that all matters with which religion has to do, lie wholly within the professional domain of theology. But neither may the scientist, on the other hand, too readily deem the apologist an intruder upon scientific reserves; since spiritual philosophy is as fully and directly implicated as physical science, in the attempt to trace the genesis of man from a monad, for instance; or in the efforts of the materialist to resolve all mental phenomena into physiological function. Of right, therefore, may spiritual philosophy claim to be heard in the discussion of such questions; not only in the way of watching logical procedures, but because she has evidence to submit of a kind that physical science is little

familiar with, or which in its eagerness it might overlook. Of such haste and oversight there is proof discoverable in many of the speculative flights of the time; while of the other liability hinted at, Mr. Tyndall warns his fellow-craftsmen where he says, "The logical feebleness of science is not sufficiently borne in mind."

It will be acknowledged by the more candid among us, I think, that the liberality I have just been commending to Christian apologists has been a very rare virtue among them. Theological conservatism has no doubt been of service to the world; specially when opinion and feeling have been giddy in regard of matters of a weighty moral interest, or when errors of a serious sort affecting religion have been in fashion. At such times, men not lightly given to change are the men to be looked to, holding on to truths that might otherwise be carried away by the infidel or heretical current. Such service has no doubt been rendered at times by a stolidly conservative theology, in behalf of threatened interests. In an uncertain, shifting world, its teachers have been the steadfast, imperturbable witnesses for what they have deemed immutable truths. They have believed all along, that, though the heavens might dissolve, and the earth be removed, there are some things here that never change, and that cannot be changed—"the same yesterday, to-day, and forever." And in support of this conservative attitude, Theology has had reasons to offer not easily answered; as when she has alleged, for example, that had those representing her claims in ages gone by, yielded to every demand of a capricious science—for science has been sometimes capricious—they had been driven to distraction; or they had been unceasingly occupied in temporizing readjustments. Something may be said, too, in behalf of theological conservatism suggested by the nature of the truths conserved; which, as being moral, and as having what theology holds to be divine sanctions, were not to be lightly surrendered. Courageously asserting the special trusteeship of such truths, Theology has "set her face like a flint" against storms of adverse criticism; and to every demand to yield any fraction of what she has held to be "the truth," she has returned a speedy and emphatic "*non possumus*." And those men are blind who find

in history, or in the contentions of the present time, no justification for such an obstinate conservatism; while they are unsympathetic souls that are empty of all admiration for such moral bravery. But, unhappily, theologians have not been content with bearing witness to immutable truths; but have entered debatable territory, in the spirit which has too generally inspired "apologetics;" claiming the right to decide controversies with which they had little to do, and which many of them have been pitifully incompetent to appreciate.

Into such "presumptuous sins" theologians have been tempted from having confounded the variable with the constant contents of what they call "the Faith;" or from having somehow been led to assume, that the honor and efficacy of religion are necessarily bound up with orthodox opinions, touching crowds of questions ill-assorted, ill-defined, some of them very obscure, and doubtful to the best informed of those professionally familiar with them. In this way religion has been involved in all sorts of needless complications; the ignorance and insolence of some of her representatives having fastened a bad reputation upon her, at times. Hence the frequent "change of base" to which theology has had to resort in the struggle with historical criticism, or with physical science; hence, too, occasional ignominious retreats from ground she ought never to have occupied; with the consequent enduring demoralization of her forces so evident to-day; her adherents maintaining the most extraordinarily conflicting attitudes towards the cultivated thought of the time; the more prudent among them seeking refuge in the doctrine of "*open questions*." But the theologian of the type I am directing these animadversions against, dislikes open questions. He must have, and others must have from him, "*positive*" truth, as he calls it. So, assuming an air becoming the terms of the commission he bears, he deals out dogmatic decisions as one having authority, and dismisses the most troublesome questions with a waive of his priestly hand! That style of defending "the Faith" is very pitiful for this nineteenth century, but it is still to a certain extent in vogue; men of considerable distinction in the Church cherishing even bitter antipathy to-day, towards some of the best authenticated results of critical and scientific

research! Instead of that sort of thing—shall I be counted an enemy in the camp if I say that—the time is here for the old orthodoxy to yield something, or very much, to the new science, if it would avoid provoking its own children to scorn? Great concessions have already been wrung, as we know, from the old hierarchical authorities. We cannot conceive to-day, what a great thing it was for those authorities to be constrained to concede, that "Moses and the Prophets" wrote, not actual, but phenomenal, truth only, in matters pertaining to physical science. But there are pressing demands just now for a considerable advance upon that, to which some of us would probably yield; willing to concede that "the sacred writers" sometimes wrote simply traditional truth, in matters pertaining to historical science.

Some of my strictures upon certain tactics of apologists may seem severe. I need hardly say, however, that I have meant no disparagement of the great body of scholarly men in this and in other lands, who show themselves thoroughly alive to the special exigencies of this age; many of them manifesting a courageous confidence in the benefits of the most adventurous explorations of the critical and scientific enthusiasm of the time; in whom may be found often, a liberality of thought, and a generosity of sympathy with modern progress; with an openness of mind towards new truth, and with a magnanimity of temper in the discussion of tentative theories, sometimes very obviously wanting in controversies between men of science themselves. Nor have the more timid of the theological fraternity done all they have done in resistance to the new light that is round us, without sore provocation; familiar as we are to-day with a species of dogmatism, all the more offensive because marking the utterances of men who have so bitterly denounced dogmatism as a hindrance to the progress of truth. A priesthood of Positivism has arisen of late, as narrow and intolerant and tyrannous in temper as the old inquisitorial ecclesiasticism ever was; which would not suppress by force, perhaps, what Positivism calls "superstition," but which gives vent to its deep detestation in imperious scorn. Declamatory and fierce in the proclamation of what is imposingly styled "The Religion of Humanity," they

have nothing but contempt for the old Evangel; although that Evangel, as some of us have read it, shows a very tender concern for humanity. They deny very vigorously, not only the validity of all evidence alleged in proof of the existence of a Maker and Ruler of the universe, but they deny the possibility of a personal God having power or place in the cosmic order. Cordially crediting matter with sense, and consciousness, and conscience, they deride all belief in the inspiration of mind; building their altars to a grim sort of god they call Force, or Law; proclaiming from platform or professional chair the gospel of a relentless Fate, or of a self-evolved and self-sustaining mechanism. The facts set in array in support of such creed are ofttimes imposing enough; but, as under all new and fervid inspirations, there is a looseness of logic, as I have already charged, very obvious often in the manipulation of the facts. If conclusions lack support with our new masters, speculation is made to yield what research has failed to find. Across every chasm in their schemes they fling a bridge of baseless hypotheses. They scorn old creeds, but they revere new formulæ. Fugitive opinions are made to do service as immutable principles; mere modes of operation, or groups of conditions, being accepted as exhaustive explanations of the mysteries they do but suggest. Or as the author of "The Reign of Law" puts the case:—"The mere ticketing or orderly assortment of external facts, is constantly spoken of as if it were in the nature of an explanation; or as if no higher truth in respect to natural phenomena were to be expected or desired." There is no man familiar with the rhetoric for which science has shown such a fondness of late, who is not familiar with solecisms of which these are but specimens.

No wonder if believers in the old Christian Gospel, ill-informed, as a rule, in speculative matters, have been startled and terrified at times by the ruthless bearing of the "new learning;" or that some of them have been driven to assume untenable attitudes in resistance to it. Yet is the fear foolish that any solid interest of morals or of religion is likely to suffer lasting damage from any form of "free thought" now prevailing. There has been a decided refluence in intellectual activity within fifty years, from spiritualism to materialism, from metaphysics to

physics; but a reaction will surely come, of which there are indications about us already; for the eternal questions are with us still, and the old eager longings are in us still; and the former can never be answered, while the latter can never be laid, by a philosophy which resolves the secret of the universe into protoplasm!

"Great God! I'd rather be
A Pagan, suckled in a creed outworn,"

than be doomed to believe that courage and cowardice, laughter and tears, the blessedness of peace, the misery of remorse; sin, guilt, shame; or truth, nobleness, sweet affections, and great thoughts, are nothing but the blind play of material elements, or the outworkings of atomic force. No such doom is upon us, or near us, as yet; since not a single essential principle of Christian philosophy has been invalidated, nor a single legitimate hope of the Christian heart been put to confusion, by recent advances in physical science. "Let knowledge grow from more to more;" only the stupid or the superstitious will be jealous of its acquisitions. The well-attested facts of all progressive science will take their place in the evolving line of order, with no serious shock to the deep foundations on which Christian faith reposes. Some men are giddy just now, while others rave, over the doings of contemporary thought. There is ground for gratitude, but none for fear. "Opinions change, but human nature survives;" and, conscious of wants which knowledge of phenomena can never satisfy, men will go on refusing to worship mechanism, or atomic activities, or electrical currents. The prophetic human soul will persist in suspecting that there is a spirit in the mechanism, that the atoms are animated, that the currents are from a higher source. Let us be patient. Of all the questions that agitate the thinking world to-day, few will send a ripple to the farther shore of time. Men launch their theories on the great sea, fondly hoping they will live through every tempest that may come; but, as with the mimic craft of children, the waters suck them in, and not even a waif floats to tell where they perished. He is a wise poet or prophet of our own time who says, or sings:—

"Our little systems have their day:
They have their day, and cease to be.
They are but broken lights of Thee;
And, Thou, O Lord, art more than they."

SOME RECENT CRITICISMS OF THEISTIC BELIEF.

[A Lecture delivered before the Summer School of Christian Philosophy, Richfield Springs, August 30th, 1883.]

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I BEG leave at the outset to amend the title of this lecture so that the criticisms to which it refers shall embrace theistic argument as well as theistic belief. And with the title so amended I promise to stick pretty closely to my text. I do not intend to construct a formal argument for the divine existence; nor do I propose to myself the task of reviewing the history of theistic proof or of criticising recent theistic literature. I have a far less ambitious duty to perform, as will presently appear.

By theism in the specific sense of the term is meant belief in one infinite, personal God. It is commonly agreed among theistic writers that however the idea of God originated it is capable of rational defence. By this is meant that it is possible to give reasons for this belief; and reasons, too, of sufficient cogency to render unbelief inexcusable. It is held that the law of causation impels us to go beyond the chain of second causes in search of a First Cause; that the order pervading the universe is manifestly a work of intelligence; and that intentionality is palpable in the adaptation of means to end in the organic world. There are three forms of the argument based upon this causal judgment. We would call them the ætiological, the cosmological and the teleological; but the cosmological has long been employed and is commonly understood to stand for the argument based on cause pure and simple. A recent writer suggests the word eutaxiological in its place, but there is always a prejudice against new words. It is quite clear that we may look at the world in three ways: as contingent—as an existence the cause of which we are in quest of; as a cosmos, the explanation of which we are

looking for; and yet again, as a great machine the parts of which are adapted to each other as means to end, as in fact, an exhibition of design and intention. Theistic writers as a rule make the distinctions here referred to and give proper place to each of the three corresponding theistic proofs. They may present the subject with varying powers of argument and they may differ in respect to the philosophy of theistic proof; but in the main they agree in the acceptance of the old argument—of a First Cause, of Order, and of Design. This is true of Flint, Diman, Janet, Jackson and others. Interesting, therefore, as their discussions of theism are, their method of dealing with the subject will not call for special attention from us, for we should only have to express our entire concurrence with the main terms of the argument.

There are other writers, however, of recent date who have made theism, and particularly these theistic arguments, the subject of ingenious and elaborate criticism; and on the principle that we can estimate the real strength of our own position far better when we have studied the effect of adverse criticism upon it, it may not be an unprofitable thing to look at what some of these writers have said. Among these I mention first

JOHN STUART MILL.

Mr. Mill's sentiments respecting theism are to be found in his posthumous work entitled "Three Essays in Religion," one of which is devoted to theism. What he says is valuable as being in its concessions a testimony to the strength of theism, and in its objections an illustration of the weakness of anti-theism. Mr. Mill is particularly earnest in his opposition to the argument based upon the idea of a First Cause; but he is forced to admit that the argument of design is entitled to very serious consideration. I will not refer to his criticisms of this argument, for in so far as they deserve notice they have been made more strongly by other writers. We do not sympathize with the disposition of so many writers, Mill among them, to confine the argumentative resources of theism to a single argument. It may be natural for the enemies of theism to do this, but it is very unwise in the friends of theism to do it. When, however, the advocates of an empirical phi-

losophy and some theists themselves undertake to ridicule teleology, it may be worth while for them to remember that John Stuart Mill, who certainly was led to do so by no love for the traditional natural theologies, entertained the highest respect for this argument, and not only said that it was the main strength of theism, but also gave it as his deliberate opinion that "it must be allowed that in the present state of our knowledge the adaptations in nature afford a large balance of probability in favor of creation by Intelligence." Mr. Mill, however, has made a serious attack upon the theistic position by his endeavor to break down the argument based on the idea of a First Cause. And if his idea of cause is true there can be no doubt that we must abandon this argument altogether. Professor Knight has said that the argument based on the contingency of the world must be given up; and other writers have fallen in with the same idea. But I think that this comes of their accepting a wrong view of causation. Mr. Mill says: "It is a necessary part of the fact of causation within the sphere of our experience that the causes as well as the effects had a beginning in time and were themselves caused. It would seem therefore that our experience instead of furnishing an argument for a first cause is repugnant to it; and that the very essence of causation as it exists within the limits of our knowledge is incompatible with a first cause." Causation with Mill means only the uniformity of nature. It is simply the relationship of phenomena in time-succession. There can be no First Cause, for the very idea of a cause is that it is a phenomenon and was also caused.

According to his doctrine:

1. Cause and effect are words that express relations between phenomena. That only is a cause which is a phenomenon; and that only an effect which appears as a phenomenon; and as God is not likely to appear as a phenomenon, He is ruled out at once of Mr. Mill's category of cause.

2. Cause and effect refer to time-relations of phenomena. It is the fact that A is the invariable predecessor of B under certain circumstances that makes it possible to predicate cause of A and effect of B.

3. An infinite regress of causes is the only conclusion to

which his doctrine can lead. For he says, "I mean by cause only that which is a phenomenon, and any phenomenon that begins has a cause." He may well say that experience would seem to be repugnant to a first cause. Certainly any new existence is due to an existence before it. And that antecedent must itself be a new existence, otherwise you would reach a cause that had always existed, and if so, the effect would have always existed. It is thus, according to Mill, a necessary part of the fact of causation, within the sphere of our experience, that the causes as well as the effects had a beginning in time and were themselves caused. This is undoubtedly true. Mill's theory of cause makes against a first cause; but where does it leave him? Can he be satisfied with a doctrine that posits an infinite series of units in succession where each is conditioning cause and conditioned effect, but where there is no unconditioned cause?

4. It follows, too, that under conditions where the law of uniformity of nature did not prevail there would be no such thing as cause and effect. Mill thinks that chaos would be a suspension of cause and effect. But we do not believe it would. We believe that though events were to get into the most inextricable tangle and predictions were impossible, we should still feel that the most unaccountable event nevertheless had a cause.

5. And what is more, as Mr. Shute has shown, upon Mill's definition of a cause, it would be impossible ever to discover a cause. For when we come to refer an event to an antecedent event as its cause, we shall find that the cause is not that event simply, but that event as affected by a number of peculiar circumstances and collocations; so that to give an account of any event it would be necessary to know almost an infinite series of co-existences and antecedents that conditioned it. And Mr. Shute affirms that on this view of the matter no cause in the sense demanded by Mr. Mill's definition ever has been or ever will be discovered. I believe Mr. Shute is right, and I am quite prepared to say that upon Mr. Mill's definition of cause we can make nothing out of the argument based upon a first cause.

But I am quite as sure that we can never make an argument for theism out of the causal judgment if we adopt a theory of mechanical causation. For suppose you extend this theory of

physical causation so as to embrace the doctrine known as the Persistence of Force. And Mr. Mill, notwithstanding his assertion of an inability to find a First Cause, says: "It would seem then that in the only sense in which experience supports in any shape the doctrine of a First Cause, viz., as the primeval and universal element in all causes, the First Cause can be no other than Force." This only means that every physical event stands necessarily related to an antecedent physical event or set of antecedents; and that the universe at one moment is the necessary result of the universe of the eternity past. If therefore we could know what the conditions of things are and all the collocations of phenomena, we should be able to predict with unerring certainty everything in the future. This is physical determinism, and to be complete as to the physical it must be complete as to the psychical. Volitions must take their place in a row of antecedents and consequents and become matters of physical determination. But when this is proposed we object. To this theory we oppose our own personality. Each of us says: "I am a cause; I originate action; I control action; by my will I liberate and direct energy contrary to all possibilities of prevision and independent of any physical antecedents."

Here is our choice then: We must go on to automatism; we must treat volitions as physical events and as belonging to the same endless chain of antecedents and consequents; or else we must say that physical causation is not the only type of causation. Physical causation it is true will not give us a Personal First Cause that is infinite, but it will not leave us personal first causes that are finite.

The reign of physical causation finds then an insurmountable barrier in the human will. Granting—a question that we do not stop to argue—that a physical antecedent can even be properly called a cause; granting that second causes are true causes, they certainly are not the only true causes, and we cannot believe that they are without sacrificing our own personality. More than that, physical causation gives us no case of real beginning, and so gives us no satisfactory illustration of causation. According to it, G is caused by F and F by E and E by C and so on *ad infinitum*, each of the series being alternately cause and

effect—no cause that is not an effect, no effect that is not a cause. But in order to satisfy the idea of causation we need a case of real beginning; and that, if it is to be found anywhere, is to be found in the sphere of personal agency: in volition. Mr. Mill, however, denies that we have in the will a case of real beginning: "The will does not any more than other causes create Force; granting that it originates motion, it has no means of doing so but by converting into that particular manifestation a portion of the Force which already existed in other forms. . . . Volition, therefore, does not answer to the idea of a First Cause since Force must in any instance be assumed as prior to it, and there is not the slightest color derived from experience for supposing Force itself to have been created by volition."

This passage illustrates the systems of rival metaphysics and ontology which are being substituted for the metaphysics and ontology of what is called the School. The great boast of the class represented by Mill is that they proceed upon the basis of experience altogether. But it turns out that they are as metaphysical as the rest after all, only in place of the entity mind they are substituting the entity Force. But there is very high authority for saying that Force as an entity does not exist; and when it ceases to have the status of a thing it ceases to stand in the way of the doctrine that the will gives us the true type of causation. Reduced to its lowest terms the world that is open to the inspection of the physicist is matter and motion. Now matter moves and the motions of matter molar and molecular are what the mathematical physicists take cognizance of. The portions of matter sustain relations of position to each other and move. These motions are calculable. They proceed at a certain rate. They are interchangeable with other motions according to a fixed scale of values. And this rate of interchange is called Force. Flying balls meeting in mid-air have their respective molar motions arrested and molecular motions set up; and heat is generated. The motion of falling water is changed into the motion of revolving wheels and grinding corn. It is a great triumph of induction to be able to calculate the ratio of this interchange. But calling this rate Force does not help us. Now I grant that my bodily organism is under-

going change and that the law of interchange of motions holds as good of this piece of matter which I call my body as of another piece of matter. But here is the fact that I by a fiat of my will can inaugurate motion; can change the direction of motion. You may say that I am expending energy in liberating force, if you will; you may say that there is a direct relation between the food I eat and the weight I can lift. You may tell me that kinetic energy exhibited in the flying foot-ball is antecedently represented in the potential energy of well-fed and well disciplined muscular fibre. But you will never persuade me that in the *nisus* of voluntary effort of which I am conscious there is not the absolute beginning of a series of motions that set out therefrom. Of course I know that physiological psychology will attempt to go behind volition. It will attempt to show not only that molecular changes follow volition but that molecular changes antedate and constitute the physical cause of volition. In this way the volition takes its place in a row of physical phenomena or rather is the psychological aspect of a purely physical act. Psychologically we will and then follow a set of molecular changes in the organism. Physiologically there is nothing but a set of motions molar or molecular. Thus automatism comes in to give unity to a mechanical conception of the universe and we are once more on the everlasting tread-mill of antecedent and consequent; motion and motion; and to rest ourselves we now and then change the terms and speak of kinetic and potential energy. The religious consequences of a successful explanation of volition on mechanical principles we may let alone until a mechanical consciousness has been made clear. Meanwhile there is nothing in the doctrine of Force, as meaning the rate and ratio of motion, to obviate the necessity of an explanation of motion or to interfere with the statement that in the human will and its exercises you have the only genuine case of a beginning of motion and so the only true example of a genuine cause. You have molar motion and molecular motion; motion calculable in foot-pounds; motions interchangeable. Still you have nothing but antecedent and consequent none the less antecedent and consequent because calculable. And the question comes:—but the beginning of all this? and you can take your choice be-

tween an infinite regress and an originator, that is, a Will of which your own will is the type. I choose to take the latter alternative. And when in the world I see matter and motion as the ultimate facts of experience, I ask for the cause; and the cause to be adequate must at least have the quality that belongs to my own volition—the power of originating change. It matters not for the purpose of the ætiological argument where you put that will. You may conceive of the phenomenal world as a succession of units, A1, A2, A3, A4, A5, A*n*, and you may place the first mover at the beginning of the series: or, writing Will as the common denominator under the series, may recognise the power of an omnipresent will throughout the series. In either case you get what the mind is searching for. You get a case of real beginning.

Mr. Mill's criticism of the argument based on a First Cause has, I do not doubt, led a good many to depreciate this argument and to propose that it be dispensed with as capable of rendering no valuable service to theism. We cannot feel so. On the contrary, the study of Mr. Mill's criticism only makes more apparent to us the truth of the following propositions regarding the ætiological argument:

1. It is not absurd to seek for a First Cause. So clear a writer as Mr. Stanley T. Gibson affirms of this argument that "it begins by asserting the law of causation and then attains its conclusion by setting the law aside." And President Bascom says: "By speaking of a First Cause we quite subvert the very notion of causation under which we are reasoning."

These writers are both wrong. A first cause can be an absurdity only on the supposition that every cause must itself be an effect. But for that statement there is no warrant whatever. If a cause is an antecedent phenomenon conditioning a subsequent phenomenon, then, being an event or change, it needs explanation, and so *ad infinitum*. But the way to avoid this difficulty is to have a right conception of cause. If every existence must have a cause and not every event, then a First Cause is impossible. But we are not required to hold that every existence has a cause. As Martineau puts it: "phenomena demand causes; entities do not." Martineau would of course admit that

this statement is not strictly accurate and that a new entity would demand a cause.

2. The law of cause and effect cannot be satisfied by any theory of the interdependence of physical phenomena; because it needs, to complete it, the doctrine of Physical Determinism as to the will. To this, however, there stand opposed, first, the consciousness of personal freedom; and second, the impossibility of expressing the phenomena of mind in the terms of matter and motion. But though it were possible to articulate all the phenomena of mind in a chain of physical antecedents and consequents, this would not satisfy the law of causation. The mind can never rest in an infinite series of contingent events. It demands an unconditioned cause of all conditioned phenomena; and unless we agree to pay no heed to the most imperative and irrepressible demands of our being, we must seek for a First Cause.

3. If we are to argue on the basis of the causal judgment the existence of a personal God, we must maintain with Bowen, Bowne, Kirkman, Mozley, Jackson, Flint, Diman, Martineau, Hopkins, and others, that volition is the true type of causation. On the principle of *ex nihilo nihil fit* all must say that since something exists something must always have existed. But the principle *ex nihilo* will throw no light upon the question what that something is. There must be one unconditioned being. But what? Is it the eternal atom or the eternal God? Will you be materialistic or theistic; or will you compromise between theism and materialism by hypostatizing Force and writing it with a capital F? Which is the more rational view depends upon the answer you give to the question, What is a cause?—depends upon your conception of agency. If the true idea of agency be found in personality and will, then, no matter how remote, there must be a personal will behind all the physical phenomena. The choices open to us are: (1) an infinite series of antecedents and consequents; or (2) a personal will controlling and directing all change. The latter view satisfies the demand for a beginning, for an ultimate cause of change; and conforms to our experience of agency.

4. The argument *a contingentiâ mundi* is really an argument based on the contingency of phenomena, not on the con-

tingency of matter. If matter can be shown to be contingent; if through the doctrine of dissipation of energy or through the dynamic theory you can prove the non-eternity of atoms, you can of course argue for the existence of God on the basis of the contingency of the world's substance. Or if through other arguments you find reason to believe in God, then you can argue as Flint does from the law of parsimony that there is no need of eternal mind and eternal matter too. But the difficulty of proving the non-eternity of matter, that is to say, the difficulty of proving that matter is contingent, has always been felt. The law of causality applies to phenomena and not to entities. Or rather it applies to entities as new or as changing and not to entities *quâ* entities. If you apply it to entities as such and ask for the cause of matter, you must apply it to God and ask for the cause of God; and then you join the company of them who say that a First Cause is absurd. If you do not apply it to entities but rather to phenomena, then the question of the non-eternity of the atom is irrelevant to the theistic discussion until its non-eternity be experimentally or inductively ascertained. But applying the law of causality to phenomena, the simple question is whether our quest of cause is satisfied with an endless succession of material changes which are alternately conditioning cause and conditioned effect, or whether a better and more probable solution of our problem is not given us in the exercise of our own wills.

From John Stuart Mill the transition is natural to

HERBERT SPENCER.

A particular criticism of the bearings of Spencer's philosophy upon theism would involve a criticism of that philosophy. That could not be attempted here; if, indeed, after what Birks, and Bowne, and Martineau, and Fairbairn, and Malcolm Guthrie have done, it were necessary to say anything upon the subject. It is possible to treat the philosophy of Herbert Spencer in its theistic aspect from three distinct points of view, and there is much in support of each to be found in his "First Principles." It may be regarded as materialistic, as theistic, or agnostic. If he be held to a strict interpretation of the formula of evolution, which he regards as the key to the unification of all knowledge, his system,

as Malcolm Guthrie shows, is materialistic and allows no room for theism in any sense worthy of the name. "Evolution is an integration of matter and concomitant dissipation of motion," etc., etc. On the other hand, though he gives no place to Force in his formula, he constantly employs it in his discussion and ends in investing it with the leading attributes of Theism. Thus he says: "We come down then finally to Force as the ultimate of ultimates. . . . Thus all other modes of consciousness are derivable from the experiences of Force; but experiences of Force are not derivable from anything else. . . . Force as we know it can be regarded only as a certain conditioned effect of the unconditioned cause—as the relative reality indicating to us an Absolute Reality by which it is immediately produced." Whether Spencer's philosophy is materialistic or theistic does not affect the argument for theism any further than it shows how difficult it is to make a theory of the universe that does not have some theistic implications. And while some of his readers are earnestly contending that he is a materialist and others that he is a theist, the keenest-eyed among them are using the discrepancy between these positions to show the utter failure of his philosophy. For if he undertake to explain the cosmos by matter and motion, he is met by the difficulty that mind cannot be thus explained and the unification of knowledge is not complete. And if he undertake to add force to matter and motion and call in an unknowable as a factor in the cosmos, he departs from the evolution formula and his system of completely unified knowledge is vitiated by the unknowable factor. Or, yet again, it may be said that the Spencerian philosophy sustains an agnostic attitude to theism, neither affirming nor denying, but affirming only the inconceivability of any theory of the universe. The latest critic of Mr. Spencer, I mean Mr. Oscar Craig, in the *Presbyterian Review*, has devoted special attention to this feature of Spencer's system in a remarkably fine piece of criticism, which well deserves a place beside the other criticisms already named. He has shown that Spencer cannot be agnostic in regard to religion without upsetting his philosophy; and that his skeptical argument is not only applicable to science as much as to religion, but also that the argument itself elaborated in Part I., which

deals with the unknowable, is overruled and contradicted in Part II., which professes to treat of the knowable. Under these circumstances it is not an easy thing to say what Mr. Spencer's personal belief may be. We cannot say he is a theist, for he explains the cosmos by matter and motion: we cannot say he is a materialist, for he repudiates the charge and affirms belief in an absolute force. We cannot say he is an agnostic, for while he affirms that creation by intelligent agency is unthinkable and the theistic conception is placed by him among the illusive ideas, he also predicates of the unknowable attributes of sufficient dignity to clothe a very respectable Theism. It is pretty evident that these paradoxes must be climinated from the Spencerian philosophy if it is to control other minds. In the interest of clear thinking the disciples of Spencer must inevitably carry his philosophy on to atheism or toward theism. That they are doing this already is quite evident.

PHYSICUS.

And as an illustration of the movement in the first direction let us instance the author who is known by the pseudonym of "Physicus." The treatise which this unknown author has given the world is designed to show that there is no rational probability in favor of theism. He criticises the leading arguments in support of theism; is particularly severe in his judgment of the argument based on the existence of the human mind; and while he thinks that the argument from general laws is by far the strongest support of theism, he thinks that the doctrine of the persistence of Force has robbed it of all its value. I shall confine myself to these two points in the references which I am about to make. The two forms of the argument based on the existence of the human mind, and which Physicus criticises, are those of Locke and Sir William Hamilton. Locke said: "There was a time when there was no knowing being—or else there was a knowing being from all eternity. If it be said that there was a time when no being had any knowledge . . . then I reply that it was impossible that there should ever have been any knowledge." To this both Mill and Physicus object. "Grant," says Mill, "that an unknown mind caused my mind; that only puts the

difficulty further back . . . the creating mind stands in as much need of another mind to be the source of its existence as the creating mind." This is absurd. It is the existence of a conditioned, contingent, dependent mind that calls for another mind; and because a finite mind that began to be calls for an infinite mind that never began to be, it does not follow that this infinite mind calls for another mind as its cause. Mill is repeating his old argument about the impossibility of a first cause; and Physicus sees that it is shallow. We are minds: only mind can produce mind: there is an independent and unconditioned mind. This is the argument. The nerve of it is: only mind can produce mind. To this Physicus replies: "What proof, what warrant for making this assertion? Answer, there is none." It may be difficult to satisfy Physicus with an answer. We can say that the contrary is inconceivable. But conceivability, we are told, is not the test of truth. Perhaps not. But inconceivability is nevertheless good reason for not believing an unsupported proposition. But says Physicus: "It is as inconceivable that mind should be the cause of matter as that matter should be the cause of mind." This is easily said; but as this is an appeal to consciousness, Physicus should speak for himself. If it is as easy for him to conceive of matter making mind as of mind making matter, I can only say that my organization does not resemble his.

Locke gives reasons for saying that matter is not the cause of mind. "Whatsoever is first of all things must necessarily contain in it and actually have at least all the perfections that can ever after exist; . . . it necessarily follows, therefore, that the first eternal being cannot be matter." Does not that seem to be true? Compare the two hypotheses and ask which commands the assent of the reason best. Let us suppose that the self-existent eternal substance is matter—matter in an extreme state of tenuity; that by simple changes of position among the atoms the cosmos, the world of sentient existence, the world of moral life, the art, the poetry, the jurisprudence, the statesmanship, the religion, the longing after immortality, the belief in the separate existence of mind and matter have grown up. That is one view. That gives to the original foundation of all things the promise and potency of all life. And here is the other: That

there is an infinite intelligence; that the world is his creation; that time-successions are exhibitions of his purpose; that the rising scale of intelligence is the ladder that leads up to him; that man is his masterpiece and mind the choicest work of his hand. Locke says the latter view is more conceivable. I think Locke was right. Locke says the other view is inconceivable. And here again I recognize intellectual kinship with Locke.

From the argument as presented by Locke, Physicus turns to that presented by Sir William Hamilton. Very unwisely Hamilton, as other men before and since have done, undertook to give special dignity to his own argument by disparaging all other forms of theistic proof. His argument, to put it in our own words, was this: 'I know that I am free; that whatever be the connection of mind and body, I nevertheless know that I am not determined in my choices by my body. I am conscious of a free personality that is taken out of the row of physical antecedents and consequents. Mind in its action is *toto cælo* different from matter. And in the microcosm of mind and body I have an argument for the supremacy of mind over matter in the macrocosm.' There is one way to break down the force of this argument. It is by teaching physical determinism. Physicus assumes that physical determinism is established. And with physical determinism established the fabric of Hamiltonian theism disappears. And since Hamilton had said that theism stood or fell with his argument, it was natural for Physicus, after he had shown that Hamilton was no great thinker, a poor logician and had made a very lame argument for theism, to cite him as a very high authority when he said that all other arguments for theism were of no value. But in spite of the attempt of Physicus to make use of Hamilton's seeming vacillation between freedom and determinism, as an argument *ad hominem*, the Hamiltonian argument is really a good one. Give me the priority of mind, give me the independence of mind in the microcosm and I shall believe in the independence of mind in the macrocosm. This is Hamilton's argument and Physicus does not touch it, nor can it be touched until the phenomena of mind are expressed in the terms of matter.

The argument for the Divine existence based on the exist-

ence of the human mind is simply a form of the ætiological argument. In that argument we may consider the totality of phenomena which constitute what we call the world, and asking for the cause we must choose, as we have seen, between an infinite series of physical changes and a personal First Cause. Or, as in the present instance, we may fasten upon a certain class of phenomena and ask for their explanation. Now in the case of human minds we have certain new events, we have entities which have a beginning, and the cause of this beginning is a question that we cannot avoid. Mind exists. Human minds had a beginning. Nothing cannot be the cause of something; matter cannot make mind. Mind is therefore eternal.

The next point in the treatise under notice concerns the author's treatment of the argument for the Divine existence based on general laws, that is to say, on the order of the world. This is the argument of which Baden Powell made so much and which he set forth so eloquently in his "Order of Nature." "When the astronomer, the physicist, the geologist or the naturalist notes down a series of observed facts or measured data, he is not the author expressing his own ideas; he is a mere amanuensis, taking down the dictations of nature; his observation-book is the record of the thoughts of another mind; he has set down literally what he himself does not understand or only very imperfectly. . . . That which it requires thought and reason to understand must be itself thought and reason. That which mind alone can investigate or express must be itself mind." The cosmological argument has never been better expressed than in the passage from which these words are quoted. Physicus seems to have appreciated it very fully, for after quoting it at great length he says: "If it had been my lot to have lived in the last generation, I should certainly have rested in these sublime conceptions as an argument supreme and irrefutable. I should have felt that the progress of physical knowledge would never exert any other influence on theism than that of ever tending more and more to confirm that magnificent belief by continuously expanding our human thoughts into progressively advancing conceptions ever grander and yet more grand of that tremendous origin of things —the mind of God. Such would have been my hope, such

would have been my prayer. But now how changed! Never in the history of man has so terrific a calamity befallen the race as that which all who look may now behold advancing as a deluge, black with destruction, resistless as night, uprooting our most cherished hopes, engulfing our most precious creed and burying our highest life in mindless desolation. Science whom erstwhile we thought a very angel of God pointing to that great barrier of law and proclaiming to the restless sea of changing doubt: Hitherto shalt thou come and no further, and here shall thy proud waves be stayed—even science has now herself thrown down this trusted barrier; the floodgates of infidelity are open and atheism overwhelming is upon us."

There is no reason to doubt the seriousness of the author in this passage, and there is something pathetic here, as there is in the place where Professor Clifford regretfully concludes that "the Great Companion is dead," in the utterance of the unrest that comes through loss of an early faith in God. You cannot resist, as you read, the impulse which sympathy dictates to tell the victim of this collapse of faith, that the world is not so dark as it appears; that in spite even of the Persistence of Force there is room for belief in the living God; that the argument from order has lost none of its cogency, and that the world is still a mirror of the mind of God. For it is the doctrine of the persistence of Force, the author frankly says, which has robbed him of his God and stolen from him the joys of life. "All and every law follows as a necessary consequence from the persistence of Force and the primary qualities of matter." Are we shut up to Atheism, as Physicus declares we are, by this doctrine of the persistence of Force? Must we choose between Theism and the Persistence of Force? or would it be possible for us to remain theists even if the persistence of Force were the accepted faith? These are interesting questions, but in order that we may see their bearing let us consider what the argument from order means, and what the criticisms are to which it is exposed.

It is a very natural thing for one to conclude that what requires thought to understand was itself the product of thought. When the logician finds that nature has the same systematic

way of exhibiting phenomena, both in time and space, that he has of arranging his thoughts; when he finds that the impulse to group phenomena in bundles and refer them to some principle of uniformity has been anticipated in nature, it is very natural that he should say that these too are expressions of mind. When from classification he goes on to homologies and finds that organisms are constructed evidently on a plan, he is very apt to say that this plan is a manifestation of mind. The physical world is full of testimony like this. Time, number, rate, ratio, weight, volume—these are all matters of the most definite and precise nature, and the physical world is an exhibition, on the grandest scale, of mathematical relations. In astronomy, geology, crystallography, chemistry, botany, the order of the world meets us with the same amazing exactness and in the same wonderful correspondence to anticipated mathematical calculation. How are these correspondences to be explained except by saying that this order is a proof of mind? It may be said that we argue from analogy, that we know nothing outside of our experience, that we see the correspondence between our thoughts and these external phenomena but that we do not know what is the cause of these relations among things. But when the result of human thinking in the severest tasks of which thought is capable is only to anticipate or discover what already exists in nature—when mathematical formulæ which express the results of complex mathematical deduction are found to express also the facts of the phenomenal world, it is very hard to believe that we would not have in all this the most positive testimony to an existence, mind in the world, as the explanation and cause of its order.

And if we are not satisfied with the theistic explanation, what explanation shall we substitute? . . . There is the doctrine of chance. Suppose we concede that inasmuch as the cosmos represents one of the many possible orders in which the atoms of the universe might have arranged themselves, it is conceivable that the present order of things was brought about by a fortuitous concourse of atoms. How much would this damage theism? We should say that the credulity of the atheist was amazing; we should agree with Mr.

Thornton (in his "Old-fashioned Ethics") that, "if any who can swallow atheism affects to strain at theism it cannot at any rate be for want of a sufficiently capacious gullet." I grant that it makes all the difference in the world when we are considering the question of probabilities whether we contemplate an event before or after its happening. I grant that we are not in the position of those who are watching nature about to empty her great dice-box and calculating the chances against the atoms so arranging themselves as to form a cosmos. I grant all that Mr. Venn says about the doctrine of probabilities having nothing to do with natural Theology. Yet it nevertheless remains true that the "Iliad" irresistibly impresses us as the work of mind and in no possible way can we believe that its letters were put together by blind chance. What is true of the "Iliad" is *a fortiori* true of the world.

Equally absurd is the attempt to set aside the theistic explanation of order by substituting law for God. I will not try to make a theistic argument out of the juristic use of the word Law, and say that every law must have a law-giver; for the word Law, as we all know, in the scientific sense means only uniformity of sequence. But theism has everything to gain by the doctrine of law. For theism is the only rational interpretation of law. The reign of law may be unwarrantably extended so as to destroy faith in miracles; but it cannot weaken the argument for theism. For since the reign of law is a great fact we have to take our choice between a law that has a rational explanation and one that has no explanation at all.

But it is said that the doctrine of the persistence of Force is fatal to the claims of the cosmological argument. Physicus says that this doctrine is the strongest objection that theism has to encounter. He considers that Baden Powell's argument would still be a sufficient bulwark against atheism but for the doctrine of the Persistence of Force. This is what he says: "Interpreting the mazy nexus of phenomena only by the facts which science has revealed and what conclusion are we driven to accept? Clearly, looking to what has been said in the last two sections that from the time when the process of evolution first began, from the time before the condensation of the nebulæ had shown any

sign of commencing—every subsequent change or event of evolution was necessarily bound to ensue. Else force and matter would not have been persistent." Now what can this mean? That if we could have been present when the process of evolution began and could have been gifted with eyesight keen enough and mathematical powers of sufficient scope, we should have seen that in the condition of things there and then the whole future of things was provided for. Suppose that were true. Would it destroy theism? The mere assertion that all the future is contained in the past, that nature is uniform and Force persistent proves nothing against theism. A mechanical conception of the universe is in the highest degree theistic provided the mechanical conception does not include mind. And the real objection that Physicus makes is one which blots out mind. For if you object that order impresses you as the product of mind and irresistibly so impresses you, Physicus replies, and the core of his anti-theism is here: 'According to the theory of evolution human intelligence, like everything else, is evolved. The macrocosm made the microcosm—the world made the individual mind. It is not strange that the orderly facts of the world should be reproduced as thought of order in mind. But let not mind go on to impute mind to the macrocosm because it finds resemblances in it to its own thoughts.' Let us then understand that, whatever doubt there may be as to the beliefs of other men, Physicus is a materialist. Matter is and matter moves, and the movements of matter under the formula of evolution have given us the cosmos. Mind is the product of evolution. Here then we must distinguish. Does Physicus mean that there is an entity mind and that mind has been evolved from matter? Then he agrees with us in affirming the dualism of mind and matter, and it is only a question which is the *prius*. I do not think that there is much difficulty in making a choice when these are the alternatives. He believes that matter made mind and we that mind made matter. Does he believe that mind is a function of matter; that there is no entity called mind, but that in the thinking, reasoning being called Physicus we have only so many atoms in relation to one another? Then Physicus is a materialist, a materialistic monist.

If, therefore, what he calls mind, meaning himself, is only matter, it is quite reasonable that he should not believe in the mind of God. If he the thinking being is nothing but a series of molecular motions, then he the mind does not exist. He, thinking and talking about order and harmony and proportion, is simply a bodily organism capable of so many orderly movements. The possibility of conceiving this is indeed very much to be questioned, and Physicus may well say that it is an unanswerable question how a conscious intelligence is possible. I can, however, agree with Physicus in saying that I cannot hold with much confidence to my belief in God's mind after belief in my own mind is gone. If I am not justified in believing in my mind as the subject of my thoughts and the substratum of my purpose, I may be excused, I think, if I doubt a purposing and intelligent, supreme and infinite mind. All this means that you cannot be a materialist and a theist, which it did not need a man like Physicus to tell us. But if I am evolved; if I the thinker am only the blossom on the tree of evolution; if I am simply the psychical side of matter, then I should like to know what knowledge is. If I am matter, that is, atoms; if I the thinker do not know myself, am mistaken about myself, am irresistibly led to believe in mind and see mind in the objective world, and it turns out that I am wrong about myself, my mind, my convictions regarding mind in nature, how do I know that I am right about matter and the persistence of Force? If I am a clock wound up to strike just so often and so loud, how do I know whether I am striking right or wrong? The persistence of Force, when carried the length of materialistic monism, blots out the theistic argument, as Physicus says, but it blots out Physicus too. It blots out belief by blotting out the basis of belief. Materialistic monism is atheism. Here Physicus is right. But materialistic monism is also nonsense.

It must be remembered, however, that those who believe in the Persistence of Force are not always materialists; for some hypostatise Force. If Force is something, is an entity which, whether personal or transcending personality, is yet not ourselves and not material, then the doctrine of Persistence of Force is not necessarily atheistic. It may be the old

doctrine of Immanent Theism over again. I do not know that it is a matter of much importance what Mr. Spencer's personal belief may be; but it is a fact that while Physicus taking a materialistic view of a mechanically constructed world pushes the Spencerian doctrine to its legitimate atheistic conclusion in one direction; Professor Fiske, on the other hand, has distinctly given it as his opinion that Spencer's philosophy is theistic We shall probably be able to put a better estimate upon Mr. Fiske's opinion after we know what he understands theism to mean; and as he has undertaken to be the champion in this country of a particular kind of theism, it may be worth while to look a moment at what he has to say.

MR. FISKE.

Mr. Fiske criticises theism in very much the same terms as those employed by the writers to whom reference has already been made; and all the arguments employed for the defence of theism are stigmatized as anthropomorphic. The argument from the exercise of our own will, from order, from design, are all exhibitions of our proneness to represent God according to the analogy of our own nature—as indeed, how otherwise can we represent Him? We have no right, it is said, to impute to God intelligence or personality. To the theist's statement that the hypothesis of a supreme Will alone will explain motion Fiske replies that, "the actuality of nature does and must ever baffle comprehension, and that, upon any hypothesis framable by our intelligence, whether theistic or non-theistic, the origin of motion must remain not only incomprehensible but inconceivable." "A disembodied intelligence which is not definable as a correspondence between an organism and its environment is something that experience cannot test, and the theologian has no right to believe in it." He quotes from Barratt the sentence, "The earth is suited to its inhabitants because it produced them, and only such as suit it live." This he regards as settling the claims of teleology, and he pronounces it "the triumphant answer with which science meets the challenge of natural theology." Anthropomorphic theism is beset, he thinks, by moral difficulties as well; for "as soon," he says, "as we seek to go beyond the process of evolution disclosed by science and posit an external agency

which is in the slightest degree anthropomorphic we are obliged either to supplement and limit this agency by a second one that is diabolic, or else include elements of diabolism in the character of the first agency itself." He looks and labors for the time when the process of deanthropomorphization shall have so far gone on that the "intelligent will postulated by the modern theologian shall have shared the fate of the earlier and more imperfect symbols whereby finite man has vainly tried to realize that which must ever transcend his powers of conception."

Now we should say that consistency would require Mr. Fiske to stand with Physicus and hold a thoroughgoing atheistic position. But Mr. Fiske is severe on atheism. He does not identify God with the universe. He does not—as Professor Seeley thinks it is a harmless thing to do—identify God with the order of the universe and call himself a theist because he recognizes material order. He holds that we are compelled to postulate an Absolute Reality, "a something whose existence does not depend upon a percipient mind." Now a man does not deserve much credit for theism because he believes in an eternal something. He could not well believe less. But Mr. Fiske says there "exists a something of which all phenomena, as presented in consciousness, are manifestations, but concerning which we can know nothing save through its manifestations."

There exists a Power to which no limit in time or space is conceivable, of which all phenomena, as presented in consciousness, are manifestations, but which we can know only through these manifestations. That might be Pantheism, but Mr. Fiske goes further: "We can in no wise identify the Power with its manifestations. To do so would reduce the entire argument to nonsense. From first to last it has been implied that while the universe is the manifestation of Deity yet is the Deity something more than the universe."

It appears, then, that Mr. Fiske is not able to explain the world in the terms of matter and motion. It appears that there is in Mr. Fiske's belief a Power, separate from the world, that is absolute and infinite, of which the universe is a manifestation and which can be known only through this manifestation. This is certainly the ground that theists occupy. But now the

question is what right Mr. Fiske has to postulate this Power? It is an entity, a metempirical entity. How can a philosophy that proceeds upon a basis of experience affirm belief in an entity that transcends experience? And where is the difference between Mr. Fiske and the believer in a Personal God, so far as this particular point is concerned? Again, what is meant by Power? Why is it necessary to resort to this hypothesis of Power? Is it not another word for cause? Does he not find himself driven to this hypothesis by the demands of his own causal judgment? Does he not get his idea of Power from his own experience of resistance? Is he not anthropomorphic then in speaking of God as a Power? I think he is; and that the process of deanthropomorphization of which he speaks is not complete in his own case. This power is known through its manifestations; known as Power by manifestations of power in the universe. But why are we shut up to the recognition of only one attribute of this absolute reality? What right has Mr. Fiske to say that we may impute Power to the absolute reality but not wisdom, not intelligence, not Personality? I do not enter here upon the question regarding the category into which Mr. Fiske's "cosmic theism" should be put. I believe with Kant that the conception of God implies a Supreme Being, the author of all things by free and understanding action; and that it is this conception which alone has interest for us. But it is well to note that Mr. Fiske is a good illustration of the fact that it is no easy matter to escape from anthropomorphism in our thoughts of God; and that Mr. Fiske has made concessions to Theism which make it impossible for him to criticise it. Returning, then, to the argument based on order which Physicus at one time thought so conclusive, we repeat that there is but one way of delivering ourselves from its influence. Physicus has chosen that way. That argument asserts that order is a manifestation of mind, and therefore that there is an overruling mind in nature. Materialism alone will silence this argument. The individual mind must be turned over to physiology and the universe explained in the terms of matter and motion. No other factor must be allowed. No metempirical entity must be invoked. No Power separate from the universe must be believed in. For the moment the

existence of that Power is affirmed we are on the way to anthropomorphism again; and consistency will require us to clothe it in the attributes of intelligence and Will. The atheist must be a materialist if he would be consistent. If he repudiate materialism let him also cease his vaporings respecting anthropomorphic theism.

It is common for men to deny that they are materialists when they are pressed hard with the consequences of their system. But it strikes one as a very inconsistent sort of philosophy that first repudiates metaphysics and affirms that we know nothing but phenomena; which then construes the universe and writes its history in the terms of matter; which even accounts for mind under the formulas of materialistic evolution; and at last denies the charge of materialism; denies the dualism of mind and matter, and affirms, if it affirm anything at all, a monistic theory of the universe. If, however, materialism be absurd, as so many are inclined to concede; if there be, not two ultimate substances, but one—then this one which is the basis of the monistic hypothesis is—what? It is not matter. What is it? Why, if there must be a thinker before a thought, a feeler before a felt, a knower before a known, there can be no way of constructing a monistic philosophy which is not suicidal except that which recognizes the thinker, the knower, as the basis of the monism. Now a theory of the universe according to which one says: 'all things are like me' is a theory which makes mind the only existence. For mind is the word that I give to that entity called me. And wriggle as men may, mind has the inside track in every controversy of philosophy: mind is the *prius* of all existence. Let mind be: I call that mind God.

WILLIAM GRAHAM.

The most interesting phase of theistic discussion at the present moment is perhaps that which concerns final causes. It would be impossible of course in the few moments now left to me to discuss this subject or even to state the issues involved. Yet I cannot help quoting a passage from the "Creed of Science," by William Graham, in order that I may add a single word of comment. In full sympathy with Prof. Fiske apparently, Mr. Graham says, "I am quite prepared to give up the old anthropo-

morphic creator who went to work in the construction of world and organisms as the architect and the machinist. I gladly deliver myself by the aid of the scientific doctrine of the eternity and indestructibility of matter from the old dogma of creation *ex nihilo* of the earth and planets by creative fiat. I am even ready, on the strength of the united claim of modern philosophy and thought made by Spinoza, Fichte, Scheling, Hegel, Schopenhauer, and Hartmann as thinkers; by Schleiermacher as a theologian and Goethe as poet, to surrender the human attributes of personality and consciousness in the Deity. . . .

"We can give up these imperfect conceptions of God, one and all, but yet we cannot abandon all belief in a purpose, an intention, a finality of some sort which has been and still is manifested in the universe and in the evolution of human destiny. . . . Men must postulate a purpose in the past to control the course of evolution, to dispense with the hypothesis of a fortuitous concourse of atoms, to avoid the notion, shocking to the reason, of endless and abortive attempts of the atoms to frame a world and produce life." Mr. Fiske eliminates Personality but he keeps power, with what consistency we have seen. Mr. Graham eliminates Personality and keeps power and purpose. Is this possible? We are at once, then, introduced to the question of final cause, a bad form of expression since it is so often misunderstood. Yet there is no need of misunderstanding it. And there was less excuse for Professor Newcomb misunderstanding it inasmuch as the address in which the mistake occurs was meant to be a defence of the mechanical theory of the universe against theological conceptions. He protested throughout the whole of his address against final causes, and does not seem to know the meaning of the term, for he uniformly confounds it with a first cause. Let us be understood then : a final cause is never an agent; a final is not a first cause; a final cause is not a cause at all. A final cause never answers the question, Why? it always answers the question, For what? The end for which a thing is, is its final cause. The final cause of the telescope is seeing distant objects. Time will not let me go into a discussion as to the philosophy of final cause; or deal with the discussions of Janet and Hicks as to its relevancy in the theistic controversy. The

argument from final cause or teleology or design is analogical, as indeed all inductive argument is. The organic world is simply a great aggregate of *as ifs*. If you say the world is full of design you beg the question of intelligence, and assuming it, you need not argue. Hicks is right here. The argument is a fact and an inference. The fact is the correspondence of part to part in an organism ; of organ to function; of organism to environment, so that these correspondences look as if they were made for each other. You may show me how they were produced; you may show me that there was a natural process whereby they all came about. But the irresistible verdict is that they look as if they were intended one for the other. Now the question is simply this: shall I say that these things which have impressed the world in all time *as if* they were intended to serve a purpose, were the result of chance, or shall I stand by the suggestion of my own mind? Explain it mechanically and say that law controlled, and that force being persistent, the organic world could be no other than it is, it nevertheless comes over us with irresistible power that the process was planned for this result and that between this theory and a chance world there is no room for a third conception. By no possibility can a mind that is conscious of forming purpose and shaping means to end resist the conviction that such purpose is manifest in nature. Nature reveals purpose quite as much as it reveals power. The fact of finality is undeniable. The *as if* of teleology is abundant. Now the question is what will you do with it? What explanation of it will you give? You may say, 'This subjective tendency to infer intelligence must be distrusted. You are arguing from analogy.' But if I am a purposing mind, why should there not be a purposing mind besides me? You may say: 'You are not a purposing mind. You are only an aggregate of atoms, and as purposeless as soda water.' This is consistent. This is hard materialism. But Mr. Graham does not say that. He says: 'I believe in finality, I believe in purpose; but I believe in an unintelligent, purposeless finality.' He does not say that what looks like purpose is not purpose but the product of a blind, unconscious intelligence. He might have said with Hartmann and others: 'I believe in intelligence but not conscious intelli-

gence. I believe there is finality in the world, but it is like the finality of the bird nests and the hexagonal cell.' Then we should have said, 'You only exchange anthropomorphism for zoömorphism, and your God ceases to be a magnified man, only to become the peer of the ant and the bee and the beaver. Is this rational?' But Mr. Graham says that he believes in purpose. Well, tell me who is the more rational, the theist who believes in one living and true God, or Mr. Graham who believes in an impersonal and unconscious purposer? Can there be purpose without a purposer? And can there be a purposer who is not a person?

ATHEISTIC SCIENTISTS.

By John Stuart Blackie.

There is a sort of men whose faith is all
  In their five fingers, and what fingering brings,
With all beyond of wondrous great and small,
  Unnamed, uncounted in their tale of things;
A race of blinkards, who peruse the case
  And shell of life, but feel no soul behind,
And in the marshalled world can find a place
  For all things, only not the marshalling mind.
'Tis strange, 'tis sad; and yet why blame the mole
  For channelling earth? such earthy things are they;
  E'en let them muster forth in blank array,
Frames with no pictures, pictures with no soul.
  I, while this dædal dome o'erspans the sod,
  Will own the builder's hand, and worship God.

AN UNBELIEVER'S DESCRIPTION OF CHRISTIANITY.

BY THE LATE LORD O'NEILL.

[The following paper was written by the late Rt. Hon. Lord O'Neill, shortly before his lamented decease, and was read at the Annual Meeting of the Victoria Institute in 1883, by the Rt. Rev. the Lord Bishop of Derry. A few years ago the editor of CHRISTIAN THOUGHT had the great pleasure of meeting the noble author in London, and found him a singularly gifted and modest gentleman, a wonderful mathematician and musician, and really entitled by his learning to rank with foremost theologians of his nation. It has been well said that this lucid paper "comes to us with the deep solemnity of a voice from beyond the tomb." It is believed that American readers will thank us for putting these pages in their possession.]

I AM not aware that I have met with any more succinct enumeration of the objections raised against Christianity, or one more plausibly expressed, than that which occurs in Mr. Herbert Spencer's "First Principles," p. 120. Speaking of the spirit of toleration which "the catholic thinker" should display, he there says:

"Doubtless, whoever feels the greatness of the error to which his fellows cling, and the greatness of the truth which they reject, will find it hard to show a due patience. It is hard for him to listen calmly to the futile arguments used in support of irrational doctrines, and to the misrepresentation of antagonist doctrines. It is hard for him to bear the manifestation of that pride of ignorance which so far exceeds the pride of science. Naturally enough, such a one will be indignant when charged with irreligion, because he declines to accept the carpenter-theory of creation as the most worthy one. He may think it needless, as it is difficult, to conceal his repugnance to a creed which tacitly ascribes to the Unknowable a love of adulation such as would be despised in a human being. Convinced as he is that all punishment, as we see it wrought out in the order of nature, is but a disguised beneficence, there will perhaps escape from him an angry condemnation of the belief that punishment is a divine vengeance, and that divine vengeance is eternal. He

may be tempted to show his contempt when he is told that actions instigated by an unselfish sympathy, or by a pure love of rectitude, are intrinsically sinful; and that conduct is truly good only when it is due to a faith whose openly-professed motive is other-worldliness. But he must restrain such feelings," etc.

And the Christian must also restrain his feelings of "indignation," "repugnance," "angry condemnation," and "contempt," when he meets with such a burlesque of Christianity as that set forth in the paragraph just quoted. Not being able to read the hearts of his fellow-men, he must endeavor to give them credit for good intentions, even when they are misrepresenting and vilifying the religion which he believes in his heart to be true, and on which he leans for deliverance from the wrath to come. He must not allow himself to be surpassed by the unbeliever in patience and forbearance, when he sees the creed which he is accustomed to hold in veneration painted in false colors, and finds doctrines which, so far as they are believed and acted on, are calculated to regenerate the world, represented as irrational, degrading, and injurious to morality. This charitable spirit I shall endeavor, with God's help, to maintain in dealing with Mr. Spencer and others who assail the doctrines of Christianity. I desire to believe that their study of the orderly and regular processes of what we call nature, has caused them unconsciously to see subjects of a different kind through a distorting medium, and that they are not instigated by any wrong motives or intentions.

In all caricatures, a certain likeness to the original is preserved. It is this, indeed, that gives them their piquancy. And it is not difficult to see, in the above passage of Mr. Spencer's, a likeness to the creed which is burlesqued in it, sufficient to leave us without any doubt that Christianity is the religion held up to scorn through it. It divides itself into five heads:

1. The carpenter-theory of creation.
2. Love of adulation on the part of the Deity.
3. Eternal vengeance.
4. Good actions intrinsically sinful.
5. Other-worldliness the motive of faith.

First, then, as to the carpenter-theory of creation.

If by this expression be meant simply a belief that God created the universe and all that it contains, what can be the object of calling it the carpenter-theory? The only conceivable object, in that case, is to make it *sound* absurd, by giving it an anthropomorphic twang which does not in reality belong to it. It is like the Puritans creating a prejudice against church organs, by calling them "whistle-pipes," or "skirl-pipes." I am not aware of having ever seen the belief in creation called a carpenter-theory by any Theist, whether the form of his religion be Christianity or any other. It is, in fact, a *nickname* most unjustly conferred upon that belief by those who reject it. It is true, we occasionally find the Creator of the universe spoken of as "the great Artificer." But it is evident to all who choose to see, that this word is only meant to be a synonym to the word "Creator," expressing (as synonyms generally do) but a part of the whole idea, and used with a view to avoid wearying the ear with the same word often repeated, as well as to impart a pleasing variety to the language. "Artificer," means, in its strictest sense, "maker," a word which is also often applied to the Creator, as witness its use in our creeds. And both these words (artificer and maker), when used in speaking of men, can only include in their signification the idea of forming things out of materials already existing Transferred metaphorically to the Deity, they connote to believers the additional idea of creating those materials. Believers, therefore, in using such words, are very far from implying that God only works as a carpenter does, from materials ready to his hand. But it suits the object of unbelievers to ridicule them as holding this view, and as associating the Deity in their imagination with a wooden bench, in the midst of planes, saws, chisels, sawdust, shavings, etc.

If they should reply that by the carpenter-theory of creation they mean the belief in creation out of nothing, then the word is a complete misnomer. Believers in creation no more believe in the carpenter-theory of creation than does Mr. Spencer himself. They believe that God called the world into existence out of nothing, the very thing which a carpenter cannot do. Mr. Spencer may, therefore, spare his indignation at "being charged with irreligion because he declines to accept the carpenter-

theory of creation as the most worthy one." Those against whom he feels so indignant might, perhaps, charge him with irreligion if he *accepted* that theory. But certainly it is not for rejecting it that they do so. It is for rejecting creation itself. It is for rejecting the doctrine that there is a conscious, intelligent Creator of the universe, or any God, unless that name may be given to the Persistence of Force which he seems to identify with the Unknowable. ("First Principles," chap. vi.)

But why should Mr. Spencer feel so indignant at being charged with irreligion? Does he wish to be considered religious? As a worshipper of the persistence of force, perhaps he does. But he cannot expect that Christians will accept that for religion. Or perhaps he only objects to the *ground* on which the charge is brought. If so, however, I think it has been sufficiently made to appear that he has entirely mistaken that ground. The ground is that he rejects God as a Creator, not as a carpenter.

Dr. Tyndall, in his well-known Belfast address, supplies us with a similar, yet somewhat different, view of this "carpenter-theory." Speaking (in p. 36) of the different forms of life, rising gradually from the simplest to the most complex, he says: "In the presence of such facts it was not possible to avoid the question: Have these forms, showing, though in broken stages and with many irregularities, this unmistakable general advance, been subjected to no continuous law of growth or variation? Had our education been purely scientific, or had it been sufficiently detached from influences which, however ennobling in another domain, have always proved hindrances and delusions when introduced as factors into the domain of physics, the scientific mind never could have swerved from the search for a law of growth, or allowed itself to accept the anthropomorphism which regarded each successive stratum as a kind of mechanic's bench for the manufacture of new species out of all relation to the old."

By those influences which have always proved hindrances and delusions when introduced into the domain of physics, Dr. Tyndall evidently means the Mosaic account of the Creation, which, according at least to the ordinary interpretation, assigns a dis-

tinct act of creation to each of the successive forms of life. And this he calls *anthropomorphism*, which is as unfair and false a term to apply to it as is the term "carpenter-theory." For what is anthropomorphism? It is taking our idea of the Deity from what we see in man. It is, to use another expression of Dr. Tyndall's, looking upon God as "a manlike artificer." But what is there that is manlike in creating the universe out of nothing? It is just, of all others, the thing which no man ever did or could do. We may justly enough ascribe anthropomorphism to the ancient heathens, who described their gods and goddesses as swayed by human passions, prejudices and interests, and having material bodies—a little more ethereal, perhaps, and more easily transformed than those of men, but sustained by food and drink (which, to distinguish them from those used for human wants, were called "ambrosia" and "nectar"), and capable of being hurt, though not completely destroyed, seeing that they were immortal. Thus, Homer represents Venus as wounded in battle by Diomede, which caused a refined kind of blood, called ichor, to flow from her hand ("Iliad," v. 340). Virgil ("Æneid," i. 315, and vii. 419) represents his gods and goddesses as changing their form when occasion required, which is, no doubt, attributing to them a power more than human; but even so, we may accept Hume's description of them, as quoted by Dr. Tyndall in the first page of his Belfast address—namely, that they "were nothing but a species of human creatures, perhaps raised from among mankind, and retaining all human passions and appetites." That the invention of gods and goddesses such as these may be ascribed to anthropomorphism, we can readily admit. But the God in whom Christians believe is as different from these as light is from darkness. These have bodies and passions like ourselves, whereas our God is a pure Spirit, "without body, parts, or passions" (Art. I.). I am not aware that any of the heathen gods were supposed to have created the universe out of nothing. Jupiter is indeed called "*pater omnipotens*" by Virgil in many places, but I find no trace of the idea that his power extended beyond a certain control over the atmosphere, whereby he was supposed to wield the powers of thunder and lightning, or such a control over matter as we ourselves have (only in a much

greater degree), whereby the mountain Olympus, which was supposed to be his throne, could be shaken by his nod ("Æneid," ix. 106). But however this be, the power to create is a power utterly impossible to man, and to accuse us of anthropomorphism for attributing this power to God, however little intended by Mr. Spencer and Dr. Tyndall, is to utter a most unfounded calumny against those who believe in the Creator of heaven and earth.

The belief in successive creations is made to sound more improbable still by Dr. Tyndall, through the use of an expression whose unfairness is indubitable. In p. 58 of the Belfast address he describes that belief as "a theory which converts the Power whose garment is seen in the visible universe into an artificer, fashioned after the human model [the usual cavil again] and *acting by broken efforts* [the italics are mine], as man is seen to act." The effect of the word "efforts" on the mind of an unthinking person would be that he should imagine the efforts of the Creator, or at least some of them, to have been unsuccessful. Else why call them efforts? Why not say they are *acts*, which word means *successful* efforts, and would truly describe the work ascribed to the Deity by believers? But he also calls them *broken* efforts, thereby intensifying the idea of want of success, because the expression seems to imply that they had to be broken off, some of them at least, in an unfinished state. If this were not the object, "successive," or some such word, would be the correct one to use. It might be asked: How would Dr. Tyndall like to hear the words "broken efforts" applied to a series of successful physical experiments conducted by himself?

It is really surprising that men of philosophical mind and habits of thought should condescend to such quibbling. If it were to promote any other object than the depreciation of religion, I cannot think they would. But for such an object as that, it seems all stratagems are allowable.

Mr. Spencer, in an earlier part of his book than that to which I have been lately referring ("First Principles," pp. 33, 34), carefully calls attention to the inadequacy of the "carpenter-theory" to serve as a simile for creation. But he does so under the delusion that Theists have adopted that theory, the fact being that

it is falsely attributed to them by the men of his school. Theists, especially those of them who are Christians, have no theory whatever on the subject of creation. By a theory is generally meant a hypothesis explanatory of some fact. The fact of creation they acknowledge, but they confess their inability to account for it by any theory. Whatever else, therefore, may be said against us, let us no more be charged with accepting, or requiring others to accept, the "carpenter-theory" of creation.

The next objection we have to consider is that in which we are accused of ascribing a love of adulation to the Deity.

If we take the word "adulation" in its usual sense, it is enough simply to deny the charge. That God is pleased with His creatures for their own sake, when they appreciate His character, however inadequately, and when they have a grateful sense of His goodness towards them, is a truth which believers are not ashamed to confess. And for the outward expression of such feelings on the part of men, they use the word "praise," but not "adulation." The word "praise," however, would not have answered Mr. Spencer's object, and therefore he prefers to call it "adulation." Now, adulation means flattery, which is a very different thing from praise. If I might venture to explain the difference, the word "adulation" includes in the idea expressed by it, the notions of servility and insincerity on the part of the flatterer, together with the supposition that the flattered person is so vain as to swallow all that is said to him, and so weak as to be induced to confer favors without reference to the question whether the object of them be deserving or not. Praise includes none of these elements. It is the outcome of admiration of the divine attributes, among which are right and justice, and freedom from all those weaknesses to which human beings are liable. This word, therefore, would not have served Mr. Spencer's turn. "Adulation" suits him much better; only it has this disadvantage, that it is utterly inapplicable to the Deity in whom Christians believe. I hope, therefore, we may no more hear believers charged with worshipping a God who loves adulation.

The next charge brought against the God whom Christians acknowledge is, that they consider punishment to be a divine vengeance, and that divine vengeance is eternal. Now it may

be fully admitted that the Scriptures often use such words as "vengeance," "anger," "wrath," etc., when speaking of punishment inflicted by God. But inasmuch as the God in whom Christians believe is described by them as a Spirit, "without parts or passions," as already observed, it is evident that they do not understand the words in question in the sense in which they are used when applied to human beings. They are used to signify that God does what *in a man* would be looked upon as the result of one of those passions, but it is not meant that the Deity acts upon any such impulse, or from any other motive than to do what is right. When the Scriptures say that the eyes of the Lord are over the righteous, and His ears open to their prayers, no one imagines them to mean that the Deity has the bodily parts there mentioned, inasmuch as they always represent Him as pure Spirit. Similarly when they say His hand is stretched out, or His arm uplifted, no one is so absurd as to think they attribute to Him literally the possession of arms or hands. Why, then, should they not be understood in a somewhat similar manner when they speak of divine vengeance? The character of God is so little comprehensible to us, that we can only take in descriptions of it which are couched in human language. We are quite unable to represent to ourselves the state of mind (to use a very inadequate expression) which corresponds in Him to the feeling which we call vengeance. Beyond the fact that it terminates in acts something similar to those which are the outward manifestation of vengeance in us, we know nothing about it. We can only believe that God punishes the wicked, because He sees it to be fitting and right that He should do so. There are, no doubt, some who question the fitness or righteousness of the acts of the Deity in this matter. But I believe that such persons speak of a matter of which they are no judges. If we were our own judges, no doubt we should punish ourselves lightly, if at all. And it appears to me that we are only able to look upon the matter from our own standpoint. I mean that we can only know what judgment we should pronounce upon our own demerits, but have no means of judging how they ought to appear in the sight of God, or with what degree of punishment it is right that they should be visited. Those of whom I have

now been speaking admit God's justice in inflicting a certain amount of punishment. They believe that His inflictions are not vengeance, such as men would exercise, and here their view of Christianity differs from that depicted by Mr. Spencer. Whether the punishment be greater or smaller, shorter or longer, he attributes it (in his representation of that view) to a motive of revenge; for although he calls it vengeance, which is a word of somewhat wider signification, the implied motive is revenge, otherwise the objection would amount to nothing. Vengeance may, I think, be explained to be the infliction of punishment from a motive of revenge. And this, all believers refuse to accept as the explanation of divine punishment. Surely if Mr. Spencer had considered the great love for the world which Christians ascribe to God—and which induced Him to give His only Son to save its inhabitants from the punishment which justice would otherwise oblige Him to inflict—he might have been saved from giving so false and injurious a representation of the divine motives, as forming a part of the Christian system.

What I have said about applying to God words ordinarily used to express human feelings, may be taken as explanatory of the Christian view (mentioned under the last division of our subject), that God is pleased when His creatures express their appreciation of His perfections in terms of praise. As we can form no adequate conception of the feeling in Him to which we give the name of vengeance, so neither can we form an adequate conception of the feeling in Him which we call pleasure. All we can say is, that everything shows us that God is good, and wills that His creatures should be good also in their degree. Goodness in man is accompanied by the appreciation of goodness in other beings, and therefore chiefly in the Divine Being, in whom it is found in all perfection. Therefore, they who appreciate the divine character as they ought are good—are, to a certain extent, such as God would have them be, and so we say that God is pleased with them, and with the praises they offer Him.

The next objection, as stated by Mr. Spencer, is, "that actions instigated by an unselfish sympathy, or by a pure love of rectitude, are intrinsically sinful."

It seems probable that the allusion here is to the thirteenth of the "Articles of Religion," in which it is declared that "works done before justification," or, as further explained, "before the grace of Christ and the inspiration of His Spirit, are not pleasant to God, forasmuch as they spring not of faith in Jesus Christ," and that not being done as God hath willed and commanded them to be done, "we doubt not but they have the nature of sin;" or it may be that Mr. Spencer had in his mind some passages of Scripture to the same effect, as "without faith it is impossible to please Him" (Heb. xi., 6), and "they that are in the flesh cannot please God" (Rom. viii., 8). Now, it cannot be necessary to observe here, except for the information of some outsiders who may read the Transactions of this Society, that the Christian doctrine is this—that owing to the fallen nature which we all inherit from the first human pair, no works that we can do, even when assisted by grace, are free from much that is imperfect and sinful; and that still more is this the case when we are not so assisted. Thus, so far from saying that an act springing from a purely good and unselfish motive is intrinsically sinful, the Christian teaching is that such an act is never done; that, however excellent a deed may appear in the eye of man, in the sight of God it is so mixed up with sinful thoughts and motives that it can only be made acceptable to Him when it is done in faith, and that, for the sake of the atonement made by His Son, whereby what is wrong in it is, as it were, washed out and not had in remembrance before Him. In the Christian system, faith is set forth as the root of all that is good in our character, and as that which makes us to be accounted righteous in God's sight. Thus, works that are done in faith are looked upon, notwithstanding all their imperfections, as good. The goodness in which they are deficient is *imputed* to them. But without faith they are not pleasing to God; and, as this is owing to their being so mixed up with worldly, selfish, or sinful motives and feelings, works not done in faith are said in the Articles to "have the nature of sin."

Now, Mr. Spencer's way of representing this teaching would make Christianity answerable for the absurd assertion that works intrinsically good are to be looked upon as intrinsically sinful;

whereas its true teaching is that *no* human works are intrinsically good, but that such of them as are done in faith have a goodness imputed to them which does not actually belong to them, and so are rendered acceptable to God for the merits of His Son.

We may observe the contrast between the mode of expression adopted in the Article and that made use of by Mr. Spencer. The Article adopts as mild a form of words as could well be thought of. It does not say that the works of which it speaks (works done previously to justification) are actually sinful, much less intrinsically so, but merely that "they have the nature of sin" (Latin, "*peccati rationem habere*"). Mr. Spencer, on the contrary, intensifies the assertion by the addition of the adverb "intrinsically," leaving no stone unturned whereby religion might be made to appear absurd in the eyes of his readers.

The fifth and last of the misrepresentations (I do not say *intentional* ones) comprised in the comprehensive paragraph quoted near the commencement of this paper is "that conduct is truly good only when it is due to a faith whose openly-professed motive is other-worldliness."

The gist and force of this lies in the rather unusual word, "other-worldliness." As *worldliness—i. e.*, a regard to our well-being in this world—is generally looked upon as a low motive to action, the imputation of *other*-worldliness has the appearance of implying that a regard to our well-being in the world to come is a low motive also. Now, no Christian looks upon a regard to our welfare, whether in this world or the next, as the highest motive; but neither is it to be looked upon as a *wrong* one. To excite a prejudice against Christianity, some unbelievers have called it *selfishness*, and pronounced it *immoral*, while they at the same time erroneously represent it as the *only* motive held out by the Christian system to those who believe in it. Thus they would have the world to suppose that the whole of Christianity rests on an immoral foundation. It might seem that a charge so absurd as this might well be left to refute itself. But it is so often urged in the present day, and that by writers whose eminence in other departments than that of religion imparts to them a factitious influence over the minds of the unthinking,

that it is incumbent on the Christian advocate to endeavor to take it to pieces and point out its baselessness and unfairness.

I shall begin, then, by calling attention to the distinction between *selfishness* and *self-love*. They are sometimes used in the same sense, but there is a proper and praiseworthy self-love, to which no blame whatever is to be attached. I should prefer to avoid the use of the word, as being liable to be misunderstood, were it not that it has been adopted by Bishop Butler as a convenient expression for that regard to our own interests and happiness which it is not only our privilege, but our duty, to act upon. He calls it *reasonable* or *cool* self-love, as leading us to consider and reflect upon the best means of ensuring our happiness in the long run. But while he looks upon this reasonable regard to our well-being as a right and proper motive, he is very far from representing it either as the highest, or the only one that ought to influence us. *Benevolence*, or a regard for the good of others, should come in at least in an equal degree ("Thou shalt love thy neighbor *as thyself*"), but both of these principles are subordinate to the moral sense, or conscience, by means of which we judge whether an action is right or wrong, virtuous or vicious, abstracted from its consequences to ourselves or others. This is the moral test to which our actions should be submitted, the principle which, as it were, reigns supreme over all the other principles of our nature. If an action be prompted by benevolence or by that reasonable self-love which I have endeavored to describe, yet if we see it to be *wrong*, we ought at once to refrain from doing it.

That the Christian religion recognizes and proceeds upon the view of morality here set forth, cannot, I think, be reasonably disputed. No doubt it holds out other motives in addition to those above mentioned, but its morality is founded upon eternal principles of rectitude. The Deity Himself acts upon such principles, as already observed, and the precepts given in Scripture show that He would have men to act upon them too.

Bishop Butler designates a reasonable self-love by the name of *prudence*, observing that, although subordinate to moral considerations, it is very superior to acting merely on such desires as happen for the moment to be uppermost. It is not properly

called *worldliness;* for prudence is a good and useful trait in the human character, whereas worldliness is not looked upon as such. Worldliness as a term of reproach appears to have little meaning, except when used by believers in a future state of retribution. Christianity recognizes prudence, or a reasonable regard to one's own interests, as a duty, when it does not lead to any violation of the principles of rectitude; only it ought not to be confined to the present life, but should provide also for happiness in a life to come. When it is confined to the present life, it is called worldliness, which has thence become a term of reproach, as implying the neglect of a man's highest interests, while unduly caring for his worldly welfare. But when used by an unbeliever in a world to come, there can be no reproach implied in it, because then it simply means a prudent regard to prosperity and comfort in the only world whose existence he acknowledges. If this be a correct description of worldliness, as I venture to think it is, there is really no intelligible meaning in the term "other-worldliness," as implying that a regard to happiness in a future state is a wrong motive. The very persons who use it would be among the last to find fault with a due regard to worldly welfare, and are therefore inconsistent when they insinuate that there is anything faulty in the endeavor to secure lasting happiness in another world. A desire for happiness, in short, is one of the strongest principles implanted in our nature, and nothing can be more absurd than to expect that a religion which has any pretension to exert an influence in the world, should ignore it, or fail to contain a provision for working upon it; subordinate, of course, to the higher motive of acting according to right. This higher motive is that which the enemies of Christianity endeavor to keep out of view.

That selfishness is not to be confounded with a reasonable self-love is obvious. A selfish person is one who thinks *only* of himself, and has no regard to the feelings, wishes, or comforts of others. But a reasonable self-love is quite compatible with a regard to the happiness of others. There may, no doubt, be particular cases in which we are compelled to choose between the good of ourselves and that of our neighbors, but these are comparatively rare: and it is evident that the two *principles* of

a desire for our own and for our neighbor's advantage are quite compatible, and in general conducive the one to the other, when all the circumstances are taken into account.

I have said that besides the duty of regulating our actions by the rule of rectitude, Christianity supplies us with motives which, if duly encouraged and cultivated, are of great assistance towards enabling us to act up to what is right. The chief and highest of these additional motives is love to God, with the desire to please Him which such love is calculated to engender. This, as well as that principle of rectitude which lies at the root of all morality, is entirely left out by Mr. Spencer in the summary of Christianity (as he represents it) which forms, as it were, the text of this paper, so as to make it appear that the only motive to do what is right is a love of self, and this love of self he characterizes by a term of reproach entirely inapplicable and undeserved, namely, "other-worldliness."

MY SCIENCE.

By William C. Richards.

Should Science tell me that my faith in God
  Is vain, since God is not, nor any need
  Of Him, then would I banish from my creed
All science, and take lessons from the clod—
Which dumb and dead, like Aaron's budded rod,
  Blooms yet, by miracle, to flowery mead,
  Where, plain, as in the Holy Book, I read
God's power and goodness written on the sod.
Not thus has Science taught my grateful soul,
  By starry gleam or secret cell explored,
  Nor bid me dash my faith against a stone.
She buoys my faith on all the tides that roll,
  And tells me if to loftier heights I soared—
  In farthest skies I should find God alone!

VEDANTISM.

A Popular Statement of Hindu Pantheism.

By T. J. Scott, D.D., of Bareilly, India.

VEDANTISM is that system of Hindu thought, in which an attempt is made to resolve the complex manifestations of the universe into unity. This is just what Spinoza attempted in his "unity of substance" in the universe, perhaps two thousand five hundred years later than the Hindu effort, and it is what Hegel sought to do still later in his doctrine of "absolute identity."

Spinoza taught that all being and phenomena are evolved from some ultimate eternal unity of substance or existence. Hegel taught that there is an *identity* running through all things; hence subject and object, the ideal and the real, the finite and the infinite, the temporal and the eternal are at base the same, and the manifestations of the universe are but a "self evolution whereby the absolute enters into antithesis and returns to itself again." These pantheists, and others who think with them, do but hold and echo what had been taught by the gymnosophists, or naked philosophers of India, as Lucian facetiously called them, ages before.

Pantheism has widely pervaded Hindu thought. This was the latest development of the speculative intellect among the Hindus in their philosophic era. They had passed through the age of polytheism, had reached the idea of a God, or something supreme over all, and ended by concluding that this supreme one alone exists. When the Hindus were permanently settled in their home in India, and the priestly caste had become a learned order placed beyond want or the necessity of manual toil, leisure brought them opportunity for contemplation and profound speculation. The question of the origin, nature, and destiny of the universe would press upon them as it always

does on the human mind in a high state of development. Greek writers give us a few glimpses of the naked philosophers as they sat in profound meditation in the Indian forests. Pantheism was one outcome of their ponderings.

It is a fact, not very remarkable perhaps, that the human mind when left to mere speculation, in its attempt to solve the problem of the universe, ends in the unity of pantheism. It was so in Greece; it is so in modern Europe. The doctrine of pantheism, as taught in the Upanishads, the Vedanta philosophy and the Bhagavad Gita, has exercised a widespread influence on the belief of the Hindus, different from anything we find, or perhaps ever will find, among the practical peoples of the West. The common mass of Hindus do not now, and certainly never did, comprehend this doctrine in all its subtleties. Comparatively few pantheists are met who hold the doctrine intelligently, yet a widespread notion exists that somehow God is not only over all and in all, but is the author of all and constitutes all that is or appears to be. Hence one will constantly find the most untutored Hindus affirming that God does all, that he is responsible for all, and that apart from him there is nothing else; that every manifestation of existence is simply a part of God, and that ultimately everything is lost or resolved in Him. This will be stated by the unlearned, without any attempt to explain or understand the wonderful fact. Thus the subtleties of a system elaborated ages ago have spread through distant generations in the form of a vague belief. Pantheism has a peculiar fascination for the Hindu mind. Many cling to this when compelled to abandon other phases of the ancient faith.

The simplest form of the Vedantist's creed contains only three Sanskrit words which may be translated, "one only essence without a second." Another statement of it is: "All this universe is indeed Brahma; from him does it proceed; into him it is dissolved." A converted Brahmin pundit, Nil Kanth Shastri, a man profoundly learned in Hindu philosophy, says that this formula, as expanded and expounded by the advocates of the Vedanta system, may be thus stated: "Brahma alone—a spirit essentially existent, intelligence and joy; void of qualities and of all acts; in whom there is no consciousness, such as is de-

noted by 'I,' 'thou' and 'it;' who apprehends no person or thing, nor is apprehended of any; who is neither parviscient nor omniscient, neither parvipotent nor omnipotent; who has neither beginning nor end; immutable and indefectible—is the true entity. All besides himself, the entire universe, is false, that is to say, is nothing whatever. Neither has it ever existed nor does it now exist, nor will it exist at any future time. And the soul is one with Brahma. Such is the doctrine of the Vedanta regarding the true state of existence; and it is denominated non-dualistic, as rejecting the notion of any second true entity."

According to Vedantism, and almost as Hegel taught, the universe is a succession of developments. It is an "evolution," as Spencer would say, from the homogeneous (pure unity) to the heterogeneous (complexity). It is a mental phenomenon worthy of study, how these Indian philosophers evolved a universe full of multiform life and being from a simple spirit essence, called Brahma, void of all qualities, of all acts, and of all consciousness.

This exploit they effected long before Spinoza and Hegel. The Vedantist begins his feat with the statement that, "the one sole, self-existing, supreme self, the one eternal germ of all things delights in infinite expansion, in infinite manifestation of itself, in infinite creation, dissolution and recreation, through infinite varieties and diversities of operation." The name Brahma given to this germinal essence is from a root which means *growth* and *expansion.*

The Vedantin struggles as best he can through the contradictions and inconsistencies of his system. The eternal spirit-essence, without attribute or consciousness or feeling, must in some way become conscious and delight "in infinite expansion," etc. Vedantins deny all attributes or qualities in the sole essence, because quality would introduce distinction, according to their reasoning, and hence dualism. Besides, quality implies some kind of limitation, but the sole essence is unconditioned. In the same way this essence has no consciousness or apprehension, for these imply a *subject* and *object*, which would be dualism again. And yet they describe Brahma, or the sole eternal infinite essence, as "existence, intelligence and joy." But this is ex-

plained as sheer or abstract existence, intelligence and joy, as one might say of sweetness apart from the thing which is sweet, that it is sweetness, pure and simple, and not the quality of anything. The intelligence of Brahma must be the highest form of thought or meditation, according to the Vedant system, that is, thought without the distinction of subject and object. This is being, "without cognition." In the same way the "joy" must be an unconditioned something existing solely in and of itself. There must be no distinction between the enjoyer and something enjoyed, for this would imply dualism, the one thing constantly to be avoided. The Vedantin might say that of the nature of all this was the infinite spirit of Christian theology, in the depths of eternity before creation began.

As we have seen, according to the Vedantin, the universe as it appears to us is an evolution from Brahma, who is held to be not only the efficient cause, that is, the producer of the universe by his power, but he is also the *material* cause of the universe, that is, the substrate, of whatever nature it may be, from which all apparently physical things are made. Various figures are used to illustrate this statement. "Nothing can come from nothing;" hence the universal substrate must draw all things from himself. What the clay is to the jar, what gold is to the bracelet, what the spider is to the web drawn from it, such is Brahma to the world. Sankara, one of the chief Hindu commentators on the Vedanta system, writes: "It may be objected that a carpenter can make a house because he is possessed of materials, but how can the soul, being without materials, create the world? But there is nothing objectionable in this. The world can exist in its material cause, that is, in that formless, undeveloped subject which is called soul, just as the subsequently developed foam exists in water. There is nothing, therefore, contradictory in supposing that the omniscient, who is himself the material cause of names and forms, creates the world."

It may be thought that here the Vedantin must meet an overthrow of his monism, or pure unity; for, whatever may have been the beginning, we now encounter a multiplicity of separate forms and beings, which have been brought into existence by

Brahma, and thus we now have dualism. But the Hindu pantheist is equal to the emergency. He claims that the world is only phenomenal. The whole phantasmagoria presented to our senses is one vast illusion. "Brahma alone exists; all else is false," is a fundamental dogma. The converted Brahmin referred to expounds this statement thus: "In the estimation of the Vedantins, Brahma is universally diffused, and over portions of him, the world, a thing of falsity, is actually produced. Brahma is its substrate, and its illusory material cause, and ignorance is its material cause. The world thus is false, and therefore so are its name and form. Its existence in one way is false and in another way it is true: the former, when it is viewed as the world; the latter, when it is viewed as Brahma. Hence the Vedantins maintain that the world is false, and at the same time that it is identical with Brahma, inasmuch as it is Brahma himself that, owing to ignorance, appears as the world."

According to this system, five words comprehend the universe, *i. e.*, existence, intelligence, joy, name and form. The first three are real; the other two are mere illusion and constitute the world of phenomena. In discussing this subject, the Vedantin speaks of three kinds of existence, which are respectively called "real existence," "practical existence," and "apparent existence." Real existence, it is said, can be affirmed only of Brahma, the supreme soul. Besides him nothing else is reality. The second kind of existence, called "practical," refers to the transactions and supposed realities of ordinary practical life. None of these really exist; all is mere illusion. The third kind of existence, the "apparent," differs from the second more in degree than in kind. By it is meant that illusory kind of existence in which, by optical or some other kind of illusion, we mistake one thing for another; for instance, a rope for a snake. Things seen in dreams or in mental hallucinations are classed here. The second kind of existence is held to be no more real than these, but we have "practical" dealings with them. Practical existence is deemed real through ignorance, to which in the third kind of existence certain other mistakes and illusions are added. The special difference between these two forms of existence seems to be, that the practical has a certain kind of false reality, which

does not exist in apparent existence, with which we can have no practical dealings; for example, no one can bathe in a stream seen in a dream. And yet the Vedantin insists that the deception in practical existence is greater than in apparent existence, because the former seems more persistently real to us, while not being in the least more so.

We are prepared now to understand more fully what these Indian pantheists mean by the statement, "Brahma alone is real; all else is false."

Naturally enough the question will come up, how did this phenomenal illusory world, which according to this system of pantheism has no real existence, come into *apparent* existence? In the answer to this question an explanation of some obscure phrases in quotations made above will come in. Preceding the evolution of the universe, according to the Vedantin, the incomplex sole entity, Brahma, willed to become multiple in the myriad names and forms and intelligences of the universe. The process of creation was effected and is maintained by a power of illusion or ignorance that can be exercised by Brahma, who by a kind of self-imposed ignorance, for his own amusement, projects the phantasmagoria of the world. It is as if some powerful writer of fiction sat enjoying the phantasms of his own imagination.

The ignorance or illusion by which the phenomenal world is formed has in it two powers, called respectively the power of *envelopment* or *concealment* and the power of *projection*. The first of these powers beclouds and obscures the soul and veils the understanding, so that the reality of things is lost. We must lay aside our Christian ideas of the divine spirit when we seek to understand what the Hindu pantheists say about this self-imposed ignorance of Brahma. And yet, have not even Christian writers suggested a kind of abdication of knowledge by Deity in some matters? Clarke, the commentator, advanced the opinion that God did not choose to foreknow the fall. Chevalier Ramsey held the opinion that God does not choose to know contingent events.

Of the *projecting* power of ignorance the Vedantins say that just as ignorance produces the illusion of a snake and raises up

its form on a rope, so this ignorance exercised by Brahma projects or raises up the phenomenal universe on the soul enveloped by it. Individual souls are thrown from it by the supreme soul and become the subject of this illusion.

Thus a universe of phenomena and experience has come into existence. It is a curious fact that according to the Vedanta philosophy, the evolution of the material or physical universe is in something of the same order indicated by the nebular hypothesis, as may be seen in the following quotation from the Vedantsār, a treatise on the pantheistic philosophy by one of the most successful native expounders: "From intelligence associated with ignorance attended by its projective power, in which the quality of insensibility abounds, proceeds ether; from ether, air; from air, heat; from heat, water; and from water, earth. As the Veda says, 'from his, from this same-self, was ether produced.' The prevalence of insensibility in the cause of these elements is inferred from observing the excess of inanimateness in them."

Vedantins hold that the individual soul while separated from the supreme soul, is encased in a succession of sheaths or bodies enclosed one within the other. The first may be called the intellectual sheath, the next is the mental sheath, and the next is the vital sheath. These three constitute the subtle body which attends the pure spirit or fragment of Brahma in its rounds of transmigration. Over this subtle body is a fourth, the gross frame composed of the coarse elements assimilated from food, and which is animated from birth to death. There is something here faintly resembling the threefold organization of body, soul and spirit, advocated by some Christian writers. Some German writers are now conjecturing that there is a subtle soul-body enclosed in the body of flesh and blood.

According to the Vedantin, salvation is deliverance from these successive spirit encasements, so that the liberated spark may mingle again with the universal divine flame. How to unravel these subtle coils, and arouse from the enchanted dream of ignorance, is the great problem of life. Deliverance is achieved by certain sacrifices, by religious exercises, by asceticism, by pious meditations leading to a perfect knowledge of the nature of things and of the sole divine reality.

THE HUMORISTS PLAYING AT PHILOSOPHY.

JOSH BILLINGS has gone so far as to intimate that he would not give a dime to know what Bob Ingersoll thinks of the mistakes of Moses, but that he might be induced to give as much as a whole dollar to know what Moses thinks of the mistakes of Bob Ingersoll, or "words to that effect." He gives us the following paragraphs, which would be just as pungent if the orthography and syntax were conformed to the standards:

"Did you ever hear ov a man's renouncing Christianity on his death-bed and turning infidel?

"Gamblers and free-thinkers haven't faith enough in their profession to teach it to their children.

"No atheist, with all his boasted bravery, haz ever dared to advertise his unbelief on his tumestun.

"It is a statistikal fakt that the wicked work harder to reach hell than the righteous do to reach heaven.

"I notiss one thing: when a man gits into a tite spot he don't never send for his friend, the devil, to help him out.

"I'd rather be an idiot than an infidel: if I am an infidel, I have made myself one; if an idiot, I was made one.

"I never saw a free-thinker yet who didn't believe a hundred times more nonsense than he can find in the Bible ennywhere.

"It is alwus safe to follow the religious belief that our mother taught us: there never wuz a mother yet who taught her child to be an infidel."

MARK TWAIN disposes of some of the modern scientific methods in the following way, really worth considering:

"In the space of 176 years the lower Mississippi has shortened itself 242 miles. This is an average of a trifle over 11.3 miles per year. Therefore any calm person who is not blind or idiotic can see that in the old oolitic Silurian period, just 1,000,000 years ago next November, the lower Mississippi river was upward of 1,300,000 miles long, and stuck out over the Gulf of Mexico

like a fishing rod. And by the same token any person can see that 742 years from now the lower Mississippi will be only a mile and three-quarters long, and Cairo and New Orleans will have joined their streets together and be plodding comfortably along under a single Mayor and Board of Aldermen. There is something fascinating about science. One gets such wholesome returns of conjecture out of such a trifling investment of fact."

BOUCICAULT has caught the "higher criticism" fever. He believes that Shakespeare was a working playwright, who had no further thought in making his dramas than their immediate production on the stage. He has a theory, for example, as to how "Hamlet" was brought out. Business in the theatre was bad, and nothing seemed to interest the audiences. "I have it!" said Shakespeare; "there is the old play of 'Hamlet,' which used to be a favorite. It's out of date and needs freshening up. I'll take it home and see what can be done with it." So he hunts up a copy, and goes to work with pen and scissors. He is a swift workman and it is not long before he returns to the theatre. The parts are given out. Up comes the actor who is cast as *Polonius*. "See here," he says to Shakespeare, "you have killed my part entirely. All the speeches for which I used to get a laugh or a round of applause you have cut clean out, and in their place you have given me a lot of moralizing stuff that I'll never be able to do anything with. If you can't give me something to get a laugh with I won't play the part, that's all." Shakespeare shows how he has changed the nature of the character, and argues that to make *Polonius* a comic rôle would destroy the design of the play in its new form. But the actor will not yield, and Shakespeare, his patience utterly exhausted, says; "Well, have it your own way and speak the old text, but for heaven's sake use mine in the first act." This is settled upon, and that is how *Polonius*, who in the first act is a dignified and wise old gentleman giving *Laertes* the sagest of advice, becomes a "wretched, rash, intruding fool" thereafter, until *Hamlet* wisely kills him off. "Oh, I can see it all," says Boucicault, "as plainly as if I had been present, and I can trace out in Shakespearean plays changes similarly brought about."

MEMORABILIA.

GALILEO.—The *Appeal*, of Chicago, has the following candid and important statement, confirming what Dr. Deems asserted in his lecture on "The Cry of Conflict," namely, that "it was the jealousy of the scientists" which sought Galileo's degradation:

"If one attacks the Romish Church, Galileo is his gun of the largest calibre. If one assails Christianity, Galileo is a whole battery. The popular impression is, probably, that Galileo was a pious, truthful, learned man of science who was hung, drawn and quartered by the Christian religion. In the face of all the tears, eloquence and indignation which have been vented over this one solitary scientific 'martyr,' it is almost cruel to tell the truth about him. He is such a magnificent weapon against the Jesuits that we Protestants are loth to give him up. But let us do justice even to the devil. Galileo's condemnation was the work of the science of his day; his enemies were his fellow astronomers, who sought untiringly to overthrow him. All the protection and support he ever received was directly or indirectly from ecclesiastics. The Roman Inquisition repeatedly refused to prosecute him, though urged to do so, and when at length his scientific enemies, who all were advocates of the Ptolemaic system, forced the Inquisition to try him, the Holy Office contented itself with permitting him to maintain that Copernicanism was 'scientifically likely in the highest degree, but not to teach it was absolutely proven.' Under this decree the Inquistion virtually stood between him and his hostile scientific brethren for seventeen years."

GUIZOT states in his "History of Civilization" (Vol. i.): "It is to Christianity, to the religious society, that we owe the spirit of morality, the sentiments and empire of rule of a moral law of the mutual duties of men." Vol. i., p. 101: "In general, when

liberty has failed mankind, it is religion that has had the charge of replacing it. In the tenth century the people were not in a state to defend themselves; and to make their rights available against civil violence, religion, in the name of Heaven, interfered." Vol. i., p. 93: "She alone (Christianity) maintained the principle of equality." Vol. i., p. 115: "The Church has powerfully contributed to the amelioration of the social state." Vol. i., p. 38: "In the very cradle of European civilization, and it was the Christian Church which, from the necessity imposed upon it by its situation of defending itself against barbarism, introduced (liberty) and maintained it."

PASTEUR.—M. Pasteur, whose discoveries in the generation of disease have been of such incalculable value to the public, was offered by a French capitalist $200,000 for his discovery of the method of preventing disease in cattle, the man of business knowing that the profits in an agricultural country would be enormous. M. Pasteur refused the offer, saying that as he was already in receipt of a government annuity which sufficed for his wants, he thought it right to give his discoveries gratuitously to the public.

READE.—With reference to the great spiritual awakening of Charles Reade, which occurred a few years before his death, the Rev. Charles Graham, Mr. Reade's most intimate religious friend, adds, in *The* (London) *Christian*, some details of Mr. Reade's later Christian life. "He became both by letter and personal intercourse a teacher of the Gospel. . . . At his house in Albert-Gate I met, at his own request, persons in whose spiritual state he felt a deep interest, that I might explain to them the way of salvation. . . . Early in 1880 Mr. Reade asked my advice in relation to his connection with the theatre. . . . Soon after he said to me, 'I have now cut off the right hand and cast it from me: I am done with the theatre.' But here it is only right to say that in the meshes of that evil net he allowed himself to be again entangled," only again to be convinced of sin in so doing, and again to leave it. Mr. Reade's last words to Mr. Graham were: "I have no hope but in God; God only

can create, and God only can re-create." The following is his epitaph, written by himself: "Here lie, by the side of his Beloved Friend, the Mortal Remains of CHARLES READE, Dramatist, Novelist, and Journalist. His last words to mankind are on this stone. I hope for a resurrection, not from any power in nature, but from the will of the Lord God Omnipotent, who made nature and me. He created man out of nothing; which nature could not. He can restore man from the dust, which nature can not. And I hope for holiness and happiness in a future life, not for any thing I have said or done in this body, but from the merits and mediation of Jesus Christ. He has promised His intercession to all who seek it, and He will not break His word: that intercession, once granted, can not be rejected: for He is God, and His merits are infinite: a man's sins are but human and finite. 'Him that cometh to Me, I will in nowise cast out.' 'If any man sin, we have an advocate with the Father, Jesus Christ the Righteous; and He is the propitiation of our sins.'"

SOUTHALL.—Mr. J. C. Southall, universally acknowledged as high authority in scientific matters, does not show much favor to pre-Adamitism. Under the title, "Death of another Pre-Adamite," he thus holds forth in his paper, the *Central Presbyterian:* "We republished some weeks ago the statement that Professor Fontaine, of the University of Virginia, has discovered traces of pre-Adamite man in the James River Valley, near Dutch Gap or Bermuda Hundreds, and called on the Professor for information. It turns out as we supposed. We have received the following note from Prof. Fontaine: 'WASHINGTON, D.C., June 18th, 1883. MESSRS. EDITORS:—Owing to my absence in the field, I have just seen your quotation from the *Charlottesville Chronicle*, and your comment. I have seen no evidence of the antiquity of man in Chesterfield. All that I saw was a quantity of "stone chips," etc., indicating that Indians had manufactured their arrows, etc., there, on a rather extensive scale. This I did not think a matter worthy of public notice, as it is nothing uncommon. Yours truly, WM. M. FONTAINE.' This puts the quietus on another pre-Adamite story. We noticed a year ago the wonderful human footprints in an ancient sandstone formation in

Nevada, which were half-endorsed by Professor Le Conte and other distinguished American geologists, but which are now abandoned, and referred to some old geological beast. That story, however, is not dead yet. It comes to us reproduced from across the Atlantic in a late number of the *Matériaux pour l' Histoire de l' Homme*, published in France by M. Cartailhac, the leading French authority on prehistoric archæology."

VIRCHOW.—A very serious statement has been made on evolution at the late Tercentenary of the University of Edinburgh, in the presence of the assembled magnates of Europe. The great Professor Virchow—a name before which the savants of Europe take off their hats—speaking in his own German language, declared with great emphasis that "Evolution has no scientific basis." He said: "In my judgment, no skull hitherto discovered can be regarded as that of a predecessor of man. In the course of the last fifteen years we have had opportunities of examining skulls of all the various races of mankind—even of the most savage tribes—and among them all no group has been observed differing in its essential characters from the general human type." He cautioned the students against loose speculation on this subject, saying that "every man who goes beyond the sphere of observation becomes a transcendentalist, and transcendentalism has always been dangerous to science." De Pressensé, of Paris, it is said, declares that Virchow's speech will have a great effect on the continent.

SUMMER SCHOOL AT KEY EAST.

THE healthy progress of the American Institute of Christian Philosophy is shown not only by a steady addition to its membership, but also by the increased attendance at its meetings. The Fifth Summer School was opened on the Seaside Assembly Grounds in Key East, on Tuesday, July 15th, 1884. Its retired situation precluded a miscellaneous audience drawn from a crowded watering place; but a large number was present, being attracted by interest in the work. Five papers were read, one

on the morning of each day; in the afternoon the lecturer took a seat in front of the platform, and the hearers of the morning became his questioners. This is an important feature of the school. If anything has been left incomplete, indistinct, or unsatisfactory to any one, he (or she, for ladies are regular attendants) has an opportunity to be set right. When the means of the Institute will allow, it is proposed to have these discussions reported by a stenographer, and published with the addresses.

The first paper was by Rev. Dr. Jesse B. Thomas of Brooklyn, on "Genesis, Scriptural and extra-Scriptural." It was an incisive review of the present attitude of modern science toward some of the problems of life. He showed the correspondence between the five books of Moses and Herbert Spencer's five essential points in the development of a perfected humanity. He thought that the destructive critic might hold that Genesis was written in the nineteenth century as well as earlier. For Genesis shows that man must be well born; Exodus, that the race must have right environment. Leviticus shows well-bred ceremonial evolution, in right social surroundings. In Numbers there is political evolution, producing the conditions necessary to advancement; and in Deuteronomy, equilibrity, or an adjustment of men to their surroundings. According, then, to the destructive critic, who makes the ethical or historical work the measure of the age which produces it, the Pentateuch must have been prophetic, or never written.

The paper of the second day was by Prof. Noah K. Davis, of the University of Virginia, whose subject was, "Am I free?" The Professor, who is never satisfied with an answer unless it can be proved by Aristotelian logic, presented during his argument a series of syllogisms which caused much discussion in the afternoon. But the answer given was decidedly in the affirmative.

On Thursday, the President, Rev. Dr. Deems, delivered the annual address. He said there was nothing to dampen the ardor of the friends of Christian truth, but much to encourage them. The tone of anti-Christian writers was losing its superciliousness, as they found how much brains, science and power were on the Christian side. Christianity has from year to year a greater hold

on young men of culture, as shown by college statistics. The rejecters of Christianity are growing despondent. Many who have been active missionaries of un-faith have been converted to Christianity. At the close of the address, Baboo Ram Chandra Bose, of Lucknow, India, asked that five hundred copies of the address might be sent to India, where he would see that they were put into the hands of educated young Hindoos, who would read them. These young men are taught that Christianity is dying out in Europe and America; that no educated man in those countries holds to it any longer. In response to the call a purse of sixty dollars was made up; and whatever balance is needed was pledged by others.

The fourth address was by Baboo Ram Chandra Bose, of Lucknow, India, who came to this country as a delegate to the Methodist General Conference in Philadelphia last May. He compared Hindoo Philosophy with that of the Christian. Hindoo philosophy is essentially gloomy. The Hindoo has a noble and lofty intellect; hence a tendency to asceticism. The speaker compared the two philosophies in their views of God, of man, and of matter. The Hindoo god is without power, "an eternal void," "an everlasting night." As for man, he is either a lump of matter, or a particle of divine essence; an illusion, or a divine dream. Matter is nothing; for its creator is nothing, and out of nothing, nothing comes: *ex nihilo nihil fit.* At the close of the afternoon discussion Mr. Bose was asked to give (if he were willing) an account of his conversion from heathenism to Christianity, which he did with a simplicity and earnestness that touched all hearts.

The last lecture of the course was by Professor Edward J. Hamilton, of Hamilton College, on "John Locke, England's First and Greatest Philosopher." Room will not permit even a brief notice of this able and interesting address. It will be published with the other lectures of the course in CHRISTIAN THOUGHT.

At the close of the School a resolution of hearty thanks was given to the officers of the Seaside Assembly, and to the kind friends of Key East, for their cordial welcome and hospitality.

ABOUT BOOKS.

[In this department we shall make mention of recent publications, especially those in the line of our studies. There will not be space for extended review. The name of the book, its publisher, and its price when known, together with a brief statement of its drift will probably meet the demands of our readers.]

Mr. W. H. Mallock, well known as the author of "Is Life Worth Living?" in his new book, "PROPERTY AND PROGRESS, or a Brief Inquiry into Contemporary Social Agitation in England," embraces three articles, the first furnishing an antidote to the poisonous teachings of Mr. George's "Progress and Poverty," and the other two correcting the mistakes of Mr. Hyndman's theory. The book is full of fact and argument of very great value. ($1. G. P. Putnam's Sons.)

In "THE BOOK OF THE BEGINNINGS, a Study of Genesis, with an Introduction to the Pentateuch," the Rev. R. Heber Newton makes his contribution towards "helping the intelligent and thoughtful to a better understanding of the nature of pentateuchal history." He frankly intimates that the book will be of no value to "those who find no trouble in the traditional teachings of the Old Testament," and hopes that "it may be read alone by those who, like the author, can find in the so-called destructive criticism a reconstruction of the old Christian faith on new and more solid grounds." The notes are ample and valuable. ($1. G. P. Putnam's Sons.)

"THE UNITY OF NATURE;" by the Duke of Argyll. This is intended to supplement the author's well known book entitled, "The Reign of Law," and is quite as able, eloquent and valuable. The following are the topics: general definitions and illustrations of the unity of nature—what it is and what it is not; man's place in the unity of nature; animal instinct in its relation to the mind of man; the limits of human knowledge; the truthfulness of human knowledge; the elementary constitution of matter in

relation to the inorganic, also to the organic; man as the representative of the supernatural; the moral character of man; the degradation of man; the nature and origin of religion; the corruptions of religion; and a general summary of conclusions. The author tries to show that the unity of nature is not material, but spiritual, and originating from an intellectual personal purpose. He favors the general doctrine of evolution, but seems to think the process stops at man. This is a most valuable contribution to the current literature of science and religion. ($2.50. G. P. Putnam's Sons.)

"THE HISTORY OF THE THIRTY YEARS' WAR," by Prof. Anton Gindely, of the University of Prague, is one of the most valuable of late contributions to history. The author has industry; he has examined the archives of Berlin, Munich, Dresden and Paris. He has conscience; he has not sought to make his pages glow by sensational accounts of battles, which are only incidents, as robbery and murder are incidents in the growth of a criminal character. He has genius for history; he penetrates character, detects motives, traces connections and analyzes diplomacy. His work has already had a sale of over 20,000 copies in Germany. Prof. Ten Brook, formerly of the University of Michigan, has laid English readers under obligation by his admirable translation and by a helpful Introductory and Concluding Chapter. The two volumes contain 28 illustrations and two maps. ($4. G. P. Putnam's Sons.)

"A RECORD OF ELLEN WATSON;" Arranged and Edited by Anna Buckland, is an admirable account of the brief life of an English girl who died before she was twenty-five, after giving evidence of the possession of the most extraordinary mathematical genius. She was a favorite pupil of the late Professor Clifford, whom she regarded as *the Master*. At one time she was thoroughly agnostic, but came to a devout Christian life by a process which is told in this book in the most careful manner. It is a book for all thoughtful and cultivated women. Published by MacMillan & Co.

A delightful and profitable book is "EVENINGS WITH THE

BIBLE: OLD TESTAMENT STUDIES," by Isaac Errett, A.M., Editor of the *Christian Standard*, of Cincinnati, O. These studies are not critical or controversial. They do not discuss theological statements or deal with doubts created by materialistic scientists, but they do interest the reader in the Old Testament and must lead to a more appreciative study of that portion of Holy Writ. It is published by the Standard Publishing Co., Cincinnati. Price, $1.50.

1. "BACON;" by Thomas Fowler, LL.D., Professor of Logic in Oxford University. 2. "SHAFTESBURY AND HUTCHISON." Same author. [G. P. Putnam's Sons publish both.] Each $1.25, being a series of English philosophers, presenting a comprehensive and detailed statement of their several views and contributions to philosophy, with biographical studies. 3. "REVEALED RELIGION, Expounded in its Relations to the Moral Being of God." By Rt. Rev. Bishop Cotterill, of Edinburgh. [Same publishers. Price $1.] This is the Bedell Lecture for 1883.

The following are published by A. D. F. Randolph & Co. "THE JEWS; or, Prediction and Fulfilment; an Argument for the Times," by Dr. Samuel H. Kellogg, Professor in the Western Theological Seminary. A valuable contribution of the philosophy of history. $1.25. "SOURCES OF HISTORY IN THE PENTATEUCH," by President Bartlett, of Dartmouth College. Being six lectures delivered in the Princeton Theological Seminary. $1.25, "THE OUTERMOST RIM AND BEYOND," by Charles Van Norden. A contribution towards patience, reverence, silence and spirituality, in the study of nature and of God.

Messrs. Funk & Wagnalls, publish the following: "THEOLOGY OF THE OLD TESTAMENT," by Gustav Friedrich Oehler. $3. This edition is edited by Professor George E. Day. A very great improvement upon the Edinburgh edition of this very able work. "THIRTY THOUSAND THOUGHTS." $3.50. Contains extracts covering a comprehensive circle of religious and allied topics. It is a library in itself, edited with great care, the introduction by Dean Howson.

Harper & Brothers publish the following: "ON THE DIFFERENCE BETWEEN PHYSICAL AND MORAL LAW," by Rev. William Arthur. $1.25. This is the Fernly Lecture for 1883.

IMPORTANT PAMPHLETS.

The Author sends the following: "OUTLINE OF THE MENTAL PLAN, and a Preparation therein for the Precepts and Doctrines of Christ," by L. W. Mansfield. May be procured of Messrs. Phillips & Hunt.

"HERBERT SPENCER'S 'RELIGION, A RETROSPECT AND A PROSPECT,' REVIEWED." A Lecture, by Rev. A. F. Schauffler.

"EVOLUTION:" an Address delivered May 7th, 1884, before the Alumni Association of the Columbia Theological Seminary, by James Woodrow, D.D., Perkins Professor of Natural Science in Connexion with Revelation, in the Theological Seminary, Columbia, S. C.

"THE NEW THEOLOGY:" a Baccalaureate Sermon, delivered to the Graduating Class of the University of Wisconsin, June 15th, 1884. By John Bascom.

"RALPH WALDO EMERSON:" a Paper read before the New York Genealogical and Biographical Society, December 14th, 1883. With After-Thoughts. By William Hague, D.D. G. P. Putnam's Sons.

"EVERY SEVENTH SOUL." By Rev. Morgan Callaway, D.D., President of Paine Institute, Augusta, Ga.

"STUDIES IN THE PHILOSOPHY OF HISTORY AND THE NEW SCIENCE OF SOCIOLOGY." By J. M. Long, A.M., Professor of Metaphysics in the University of Mississippi.

THE FIELD TO-DAY.

[Anniversary Address delivered before the American Institute, at Key-East, N. J., 17th July, 1883; and repeated at Richfield Springs, N. Y., 25th August, 1884.]

By Charles F. Deems, D.D., LL.D.,

President of the Institute.

WE close the third year of the history of the American Institute of Christian Philosophy. It is expected that the President shall note the event by some remarks.

GROUNDS OF ENCOURAGEMENT.

In looking over the whole field, both of the special work of the Institute and of the general condition of intellectual, moral, and religious movement, there does not seem to be, upon the whole, anything to dampen the ardor of those who love "the truth as it is in Jesus."

MODIFIED TONE OF OPPONENTS.

On the contrary, there seem to be increasing grounds of encouragement for all earnest Christian thinkers and workers. Those who recollect the tone of the few non-Christian scientists of twenty years ago, and compare it with their modes of utterance of to-day, will perceive a very great change. Then it was dominant, supercilious, overbearing. Whoever did not accept every fresh and crude hypothesis which seemed antagonistic to the claim of the Bible and Christianity was treated as a stubborn fool or a pitiable simpleton. And in some circles the claims of a supernatural religion were scarcely regarded as deserving the slightest attention from a man of sense. That manner has not yet totally disappeared, but it has been greatly modified. As discussions have gone forward, it has been ascertained that there were more men of brains respectable for their scientific attainments and philosophical abilities among the friends than among the foes of supernatural religion. The mere bandying of words

has been exchanged for a wrestling match in which the sneerers at Christian truth have been surprised to find what muscle there was in the men who had neither imitated their braggadocio nor were intimidated by it. Each new-comer has been challenged. Each scientific hypothesis, as propounded, has been carefully examined. The instruments of scientific tests have been as skilfully employed on the one side as on the other.

INCREASE OF LITERATURE IN OUR DEPARTMENT.

The excitement of debate has stimulated the activity of production. The last quarter of a century has produced a scientific literature created by men of profound religious convictions; a scientific and philosophical literature surpassing all that has appeared in all the preceding Christian centuries. Associated efforts like those put forth by the Victoria Institute of Great Britain and the American Institute of Christian Philosophy, have brought out papers and lectures exposing the fallacies of the anti-Christians and demonstrating how wholly unhurt was the true faith of simple and childlike men by all the subtle reasonings of those who could see nothing in the great volume of Nature but arguments against the existence of its Author.

In that high and healthy literature, every year commanding more and more attention, several things have been shown. (1) Much that had been assumed to be settled on a scientific basis and to be deadly to Christianity, has been shown to have no rational basis whatever. (2) Much other has been shown to be manifestly mere conjecture, which has not yet made good its claim to be considered knowledge, and the assumption of any force it may have against a supernal religion to be puerile. (3) In whatever has been demonstrated to be real science, it has been shown that there is nothing which can reasonably be held to be antagonistic to the religion taught in the Hebrew and Christian Scriptures. (4) And beyond all that, from the results of scientific research and philosophical examination, there has begun to be gathered a great store of facts and arguments which go to confirm men's faith in revealed truth and to corroborate and illustrate its teaching. So it has come to pass that theoretical religion has to-day a better footing among thoughtful men than it ever had before.

CHRISTIAN BOOKS.

While great progress has been made in the production of scientific and philosophical literature for those who have the time, the ability, and the inclination for studies that are exacting, there has been an increase of books distinctly Christian, didactic and devotional. More Bibles, prayer-books, and sermons have been printed and sold, or otherwise distributed, than in any former quarter of a century. The publishers of religious literature find no falling off in the market. In this country there has also been some demand for anti-Christian books, which can readily be understood, but it does not seem to be growing, and the publishers of that class of literature have been represented as saying that the calls for their publications are largely from Christian scholars who have a natural scholarly desire to see what new thing can be said on the other side.

INCREASE OF CHRISTIAN EFFORT.

There seems also to be no diminution of Christian effort, but rather an increase. There are more churches built than ever before; there are more men devoting their lives to the propagation of Christian principles and the extension of Christian work; there are more mission stations in all parts of the world in 1884 than there were in any previous year; there are more church communicants in Christendom in proportion to population than ever before; there are more persons in attendance on the public services of religion and more children early taught religious truths than ever before; and there are very many more thousands of dollars given for the propagation of the Christian faith than ever found such an outlet since the prophet of Galilee was accustomed to say, "It is more blessed to give than to receive." The hold of Christianity upon the minds of our young men of culture is, notwithstanding all the active skepticism of the age, stronger than it ever was before. The latest report of the college Young Men's Christian Associations in the United States and Canada gives returns from 170 colleges, embracing nearly 35,000 students and containing all the larger colleges, Harvard alone excepted. 14,000 of this number are church members, and over 1,500 have professed conversion during the past college year. Attempts have been made by the enemy to disparage the pro-

gress of Christianity by striving to create the impression that the opposite state of affairs exists. A resort to statistics shows that the several statements made above are in accordance with the facts. Now, surely if Christian faith and principles were dying out in the world it would be impossible to account for the great, vigorous, living growth of Christian activity.*

OUTSIDE CHRISTIANITY.

We are apt to think of Christianity only as set forth by some form of ecclesiastical system. Men are coming to see that this is a mistake, that there are Jews who have never been circumcised and Christians who have never been baptized. In places where and at times when there has been observed a breaking away from theologic dogmas and churchly forms there has also been observed a solemn sense among men of the existence of the supernatural world and the rightful claims of moral obligations. Many thoughtful men think they have come to see that the existence of each ecclesiastical organization is due solely to "the importance imputed to some form of theological statement or church administration." When such men retreat from dedicating their lives to the mere keeping up of church forms they do not thereby become irreligious: they are too religious to pursue any other course.

Then the spirit of Christ and of His religion is spreading outside all the Churches and stimulating to much active humane work. There are many who would not acknowledge themselves Christians because they have an idea that this involves certain professions they are not ready to assume, who, nevertheless are actuated by Christian motives and are doing Christian work as much and "as faithfully as the average member of a Church."

*A few items which have fallen under notice while this address was in course of preparation may be worth preserving: During the last decade Protestantism in this country has contributed for missions, home and foreign, $56,136,636. In the decade beginning with 1810, the amount of contributions for these objects was $206,210. Every ten years show a large and steady increase.—Last year the women of the United States gave $600,000 towards Christianizing the heathen. Of this large sum Presbyterian women gave nearly $200,000; Baptist women, $156,000; Northern Methodist women, $108,000; and Southern Methodist women, $26,500.—The Methodist Church Extension Board has received $2,500,000 in its twenty years' history, with which it has built 4,500 houses of worship, with 1,000,000 sittings, that are now worth $8,000,000.

"Multitudes who are rarely seen inside a church are governed to a considerable extent by the ideas of duties which Christ has diffused far beyond the church circle. Multitudes who are strangers to the Christ of formal theology, recognize the Christ of the Gospels as the great Friend and Brother of man, and His Golden Rule and law of neighborly benevolence as of divine authority." (From "Unconscious Christianity," by Rev. James M. Whiton, in *The New Englander*, May, 1884.)

If we look outside of Christian churches and their attendants at those who have openly expressed their want of faith in a supernatural religion there are signs which are far from discouraging.

INFIDELS DESPONDING.

The men who are laboring to destroy Christianity do not grow happy. There is a certain exhilaration while their bright but injurious books bring them copyright, and while crowds of men are found willing, for reasons which bring no credit to their minds or their hearts, to pay a dollar each and contribute also their applause to a preacher of blasphemy; but as life wears on, and as there comes to such men a revelation of the probable effects of their teaching on the future of society, they grow very despondent.

M. Renan is reported to have said, "We are living on the perfume of an empty vase. Our children will have to live on the shadow of a shadow. Their children, I fear, will have to live on something less."

It would be almost cruel to ask this brilliant writer who they are that have emptied the vase and who they are that have spent their strength in taking the substance out of all human life, so that nothing but the shadows should be left. But should he be spared that keen question, unless he frankly repent and employ the remainder of his life in laboring to neutralize the poison he has so insidiously injected into society, and which now infects him and produces a deadly despondency?

We have, however, comfort for him and for all his class. Their grandchildren will live in an age of increasing Christian activity, in an age when Christianity will be more stripped of ecclesiasticism than now, and the mind of the Spirit in the Word

of God will be better known, and there shall be an increase of that faith which rounds out reason and complements the barrenness of this life with the fruitfulness of the life to come. They will have something better than perfume and more substantial than shadows.

Now let all men pause and consider the pitifulness of this case. A few gifted men have been employing their powers in accumulating an estate for posterity, and a leader of them thus makes statement of the assets of the estate: in hand, "the perfume of an empty vase;" for the next generation, "the shadow of a shadow;" for the third generation, "something less." No wonder M. Renan is despondent. The more his descendants believe as he does the less they will have.

A man whose character was much superior to that of M. Renan was the late Professor Clifford, of England. On his dying bed he uttered some inexpressibly mournful thoughts, which are strikingly similar to the testimony of M. Renan. Professor Clifford said:

"It cannot be doubted that the theistic idea is a comfort and a solace to those who hold it, and that the loss of it is a very painful loss. It cannot be doubted, at least by many of us in this generation, who have received it in our childhood, and have parted from it since with such searching trouble as only cradle-faiths can cause. We have seen the spring sun shine out of an empty heaven to light up a soulless earth; we have felt with utter loneliness that the Great Companion is dead."

The laborers on the Christian side have no such gloom. We may die but the Gospel will live. The more our descendants receive and believe and live this Gospel we preach the happier they will be. We grow cheerful as time goes on, and as our departure is at hand. Men may live and men may die, but Christianity goes on forever.

DISSENSIONS IN THE ENEMY'S CAMP.

Christianity can be no loser from the dissensions in the camp of the enemy. Here is a short chapter out of the literature of the first quarter of the current year. In the January number of *The Nineteenth Century*, Mr. Herbert Spencer gave a characteristic article on "Religion," in which he traces religion to a prim-

itive belief in ghosts! He caricatures the Christian religion by the following sentence: "So too must die out the belief that a Power present in innumerable worlds throughout infinite space, and who during millions of years of the Earth's earliest existence needed no honoring by its inhabitants, should be seized with a craving for praise; and having created mankind, should be angry with them if they do not perpetually tell him how great he is." In the March number of the same review appeared an article entitled "The Ghost of Religion." It is from the pen of Mr. Frederick Harrison, who is supposed to be the leader of Positivism in England. He praises Mr. Spencer's article as being the final word of Agnosticism, but strongly avers that "the coming religion" of the agnostic evolutionist is just "no religion at all;" it is merely the ghost of religion. Here are examples of the way in which Positivism buffets Agnosticism:

"In spite of capital letters and the use of theological terms as old as Isaiah or Athanasius, Mr. Spencer's Energy has no analogy with God. It is Eternal, Infinite, and Incomprehensible; but still it is not He, but It. It remains always Energy, Force, nothing anthropomorphic; just as electricity, or anything else that we might conceive as the ultimate basis of all the physical forces. None of the positive attributes which have ever been predicated of God, can be used of this Energy. Neither goodness, nor wisdom, nor justice, nor consciousness, nor will, nor life, can be ascribed even by analogy to this Force. . . . For my part, I prefer Mr. Spencer's old term, the Unknowable; though I have always thought that it would be more philosophical not to assert of the Unknown that it is Unknowable. And indeed I would rather not use the capital letter, but stick literally to our evidence, and say frankly 'the unknown.' Thus viewed, the attempt, so to speak, to put a little unction into the Unknowable, is hardly worth the philosophical inaccuracy it involves." "Agnosticism is no more religion than differentiation or the nebular hypothesis is religion." . . . "A religion which gives us nothing in particular to believe, nothing as an object of awe and gratitude, which has no special relations to human duty, is not a religion at all. It may be a formula, a generalization, a logical postulate, but it is not a religion. The Unknowable has managed to get itself spelt with a capital U; but Carlyle taught us to spell the Everlasting No with capitals also. . . . To make a religion out of the Unknowable is far more extravagant than to make it out of the Equator. We

know something of the Equator; it influences seasons, equatorial peoples, and geographers not a little, and we all hesitate, as was once said, to speak disrespectfully of the Equator. But would it be blasphemy to speak disrespectfully of the Unknowable?" . . . "In the hour of pain, danger, or death, can any one think of the Unknowable, hope anything of the Unknowable, or find any consolation therein? . . . A mother wrung with agony for the loss of her child, or the wife crushed by the death of her children's father, or the helpless and the oppressed, the poor and the needy, men, women, and children, in sorrow, doubt and want, longing for something to comfort them and to guide them —something to believe in, to hope for, to love and to worship— they come to our philosopher, and they say, 'Your men of science have routed our priests, and have silenced our old teachers. What religious faith do you give us in its place?' And the philosopher replies (his full heart bleeding for them), and he says, 'Think of the Unknowable!'"

Braver, truer and more pertinent words could scarcely be expected from even the ablest champions of the Christian faith.*

REACTION AMONG INFIDELS.

In addition to all this, among many who have been active missionaries of unfaith there is a reaction. Thomas Cooper, while he was under the dominion of that faith-in-nothing which begets doubt of everything, while contemplating the condition of annihilation to which he supposed he was to be reduced, wrote these lines:

"Farewell, grand sun! How my weak heart revolts
At that appalling thought—that my last look
At thy great light must come! O, I could brook
The dungeon, though eterne! the priests' own hell,
Ay, or a thousand hells, in thought, unshook,
Rather than Nothingness! And yet the knell,
I fear, is near that sounds—to Consciousness farewell!"

Rev. W. Harrison tells us that "the gracious hand that saved the sinking disciple has been stretched forth to Mr. Cooper, and from the deluge of darkness and mental agony he has been saved by the same redeeming and loving power." The same writer is the authority for the statement that a London journal asserts

*Since the delivery of this address I have read Mr. Herbert Spencer's reply to Mr. Harrison. It is a searching paper, pointing out the absurdities of Positivism as Mr. Harrison has pointed out the absurdities of Agnosticism. Thus rejecters of Christ reject one another.

that "of twenty infidel lecturers and writers who have been prominent in the last thirty years, sixteen have abandoned their infidelity and openly professed their faith in Christ and their joy in his salvation."

M. Hegard, Professor of Philosophy in the University of Copenhagen, has until recently been the apostle of atheism in his country. He has, says the *Semeur Vaudois*, just published a second edition of one of his works, and this is what he says in the introduction: "The experiences of life, its sufferings and griefs, have shaken my soul, and have broken the foundation upon which I formerly thought I could build. Full of faith in the sufficiency of science, I thought to have found in it a sure refuge from all the contingencies of life. This illusion is vanished; when the tempest came which plunged me in sorrow, the moorings, the cable of science, broke like thread. Then I seized upon that help which many before me have laid hold of. I sought and found peace *in God*. Since then I have certainly not abandoned science, but I have assigned to it another place in my life."

Surely in view of all these facts and considerations we may thank God and take courage.

TREATMENT OF ANTI-CHRISTIAN SCIENTISTS.

And we are encouraged to do that which it is plainly the duty of educated Christians to do, namely, to cultivate the spirit of magnanimity towards those who oppose the truths which seem to us not only precious but permanent.

Have the unchristian modern scientists been always treated wisely—we do not say kindly, or even fairly? They are men of some power. No Christian man can hold them in contempt. They are not insignificant forces in the world of thought. Men that can have attracted so much attention must be luminous. Men that can excite so much mental activity in so many quarters must be forcible, however mistaken.

They have broached theories, stated propositions, promulgated dogmas which may prove to have insufficient basis in true science. Their systems may seem to be antagonistic to the systems commonly received among people called Christians. They may not always have treated Christians with knightly

courtesy. In their zeal for the defence of their favorite theories they may have said many imprudent—perhaps many wrong things. Those who are acknowledged as Christian thinkers may regard their systems false, their methods bad, their influence injurious. If so, this state of affairs devolves upon Christian thinkers the important work of diminishing their influence by demonstrating the fallacy of their writings and speeches. No good ever came of reviling. Making faces at one another is the poor revenge of silly children. Whatever can be known to be false can be proved to be false.

Moreover, the writings of these gentlemen, if injurious, must be injurious to two classes of people—those who desire to reject the truth, or those who, sincerely desiring to believe the truth, are captivated by the fallacious arguments brilliantly made in favor of error. It is well-known that a man can be just as sincere on the wrong side as on the right side of a proposition, which, after all, must be established or destroyed, not by the sincerity of advocate or opponent, but by logical processes. These very gentlemen may have been just as sincere in blinding themselves with their philosophy, falsely so-called, as a portion of their readers are in being so blinded. This does not save them from the injury which always comes of believing the false to be the true; but it ought to save them from the allegation of insincerity. They are men who hold good positions in society. not by force of wealth or rank, but of intellect and character. Apart from what is wrong in their writings, some of them are said to be estimable men. It really does no good to cast slurs upon them. If at any time they have behaved unfairly in maintaining what we think to be wrong, that certainly can never justify us in behaving unfairly toward them in striving to establish the right.

The more we give importance to the personal part of the controversy the more we detract from the importance of the argumentative portion. It is a difference of opinion. They are possibly right—we are quite sure that they are wrong. We are possibly wrong—we are quite sure that we are right. It is a question which, after all, must be settled by argument. If they are right, they will be able finally to establish it, though we call

them and their theories by all sorts of nicknames. If they are wrong, we shall overthrow them, no matter what may be the epithets they apply to us; but if they are wrong and we are right, all treatment of them and of their writings which is contrary to Christian courtesy will postpone the day of the triumph of truth. Let us allow them everything they can fairly claim of genius, learning, laboriousness, and even love of truth. Our attacks upon their sophistry will have more force from this generous treatment of their good qualities.

Something might be gained also to what we think the Christian side, if when a new theory is advanced we could calmly wait to see whether it can put in any good show of probability; and then take the ground, that, supposing this new theory established, there would be nothing therein to disturb the peace of simple-hearted Christian people; that religion being a lively feeling of the relationship existing between the individual soul and God, it is wholly unaffected by the state of scientific opinion in any age of the world; that religion is always the same and science is always changing.

We may take the same ground in regard to the Bible. That which it presents us of the character and actions of God is such as only He can tell of Himself, and is what science never discovered and never could discover. It does not seem wise to take it for granted that every new scientific theory has necessarily a tendency to upset our faith. It would be just as weak as to sink into spasms of fear lest the ocean was to be dried up because a new fish had been found in the sea. If our religion be true, it is the grandest and most enduring truth. If any new thing is proved scientifically, so far as it can be shown to have any connection with religion, it will be demonstrated to be in harmony therewith. No matter how we came, we came from God. No matter through how many changes the originally created Adam may have been carried before it *ripened into us*, Christian people can turn to one another and say, "Beloved, *now* are we the sons of God." Whether it be by the single step of creation, or the double step of creation and redemption, or the three steps of original creation, intermediate evolution, and final redemption, "*Now* are we the sons of God."

It is at least prudent to concede that these gentlemen may have no intentions adverse to Christianity, unless they distinctly affirm their opposition. They make certain observations which give them certain results. They reason upon these in certain ways which lead them to certain conclusions. A Christian stands by and says, "Why, that cannot be so, because that would be contrary to Christianity." The instant reply is, "We cannot help that. We must speak out what we take to be truth. If the truth be contrary to Christianity, so much the worse for Christianity." Whereas, what the scientist claims to be an established truth may as yet be only a suggested hypothesis; or, if it turn out to be true, the objector's notion of Christianity may be false. A man ought to have enough confidence in his religion to have patience. The Christian religion is true or false. If false, we ought all to abandon it; if true, it will outride all errors. By a short-sighted zeal of professed Christians, men may be driven into antagonism to Christianity who may have had no original disposition that way. May it not be wiser to adopt the plan of taking all the grist that comes through the mill of science, and striving as far as we can to make this meal up into the bread of religion?

This course would certainly leave to Christian philosophers and scientists their whole power for the scientific and philosophic refutation of all the errors propagated on the other side and for the establishment of the truth.

BLATANT ANTI-CHRISTIANS

But while we should inculcate and exemplify this spirit towards the better class of the opponents of our faith, all Christians should labor to set before the masses of the people, in conversations and by promoting appropriate lectures and by the constant reproduction in local journals of the facts which annihilate the boasts of the blatant anti-Christians, the men who lead away simple-hearted people, young and old, by appeals to their passions or their prejudices.

A MISREPRESENTATION.

One of the boasts of these unscrupulous men is that *all* the scientists of the age are infidels, and that *all* science is antagonistic to Christianity. A falsehood may be dinned into the ears

of people until it will come to be accepted as the truth, and there are young persons in Great Britain and America to-day who are so constantly in the circle of error and away from enlightenment that it would surprise them to learn that there is a *single* man entitled to the name of scientist who is openly or secretly a Christian. Now the truth is that an anti-Christian is an exception in the ranks of scientific men, almost all the eminent scientists of the day being devout believers in the religion of Jesus Christ. Let vague and loose statements be brought to the test of facts. Ask for a list of the men *who are accounted scientists by scientists.* Take the men so named and count, or weigh, or measure them, and see what proportion are professed rejecters of religion. Read this list to the people who are misled and see how it will open their eyes. How, then, did this idea find place? The explanation is not far to seek. No good man boasts of being a religionist. He does not flaunt his profession in the eyes of his fellow-men. His co-religionists do not ordinarily trumpet his belief. But if a man become known to the community and seem to commit himself against religion, he is glorified and made a hero and quoted. It is so in every department of society. In mercantile circles the suspension of one firm or the breaking of one bank will create more noise in a week than the regular prosperous working of a thousand banks and ten thousand merchants will make in a year. There are a million of men in the United States who have never committed felony of any sort and whose names have never appeared in any newspaper. They are the good unknown. Every wretch who has taken a human life has had his name paraded to the eyes of all the readers old and young, throughout the length and breadth of the land. Reading the daily papers and taking general and superficial impressions, one might thoughtlessly reach the conclusion that the most of the population of the land is engaged in petit or grand larceny, swindling or robbery, burglary or arson, seduction or adultery, homicide or murder in the first degree. But we know that this is not true. Nor is it true that because a few noisy blasphemers are claiming the scientists on their side, therefore those gentlemen are opposed to religion.

SCIENTISTS AT PRAYER.

At the session of the American Association for the Advancement of Science, held at Minneapolis in 1883, according to a custom which has been in favor for years, a prayer-meeting was held on Sunday afternoon, which was attended by a large number of the members of the Association, many of whom took part in the services. At that meeting the leader remarked that the earliest teaching of literature or science imposed and taught the worship of God as Creator and Preserver. He then read the 19th and 42d Psalms, as the lesson of the hour. Principal J.W. Dawson, of McGill College, Montreal, Canada, followed with remarks. Said he: "Men of science are not antagonistic to true religion: they are seeking truth. Paul certainly, and also Luke, among the apostles, should be ranked among the scientists of their day. There is no incongruity between the pursuit of truth in science, and a devout and God-fearing spirit." Professor Young, of Princeton (who is an honored member of the American Institute of Christian Philosophy), who was President of the Association for the year, followed with similar remarks, declaring that this was not an irreligious association, but one that realized its responsibility to the Maker of all; and reverently added: "We need a stronger and more living faith." Dr. Hovey, of New Haven, Conn., the originator of the Association's prayer-meeting, said: "We seek the truth, seek it earnestly, humbly, yet fearlessly; being assured that from these efforts no detriment can come to true revealed religion." He then referred to the devout spirit of scientists, and instanced the first message sent by telegraph, viz: "What hath God wrought;" and also to the other first one, when the telegraph encircled the world, to wit: "Glory to God in the highest, on earth peace, good will towards men!"

It is worth remarking how little that prayer-meeting was noticed by the press. It is a better answer to the ridiculous "prayer-test" proposition of a few years ago than one-half the arguments which have been elaborately employed, and yet it was ignored by the news-mongers, while the prayer-test was hailed and heralded and kept before the eyes of all the people. The Christian people everywhere should see that the facts on our side

are reproduced in their local journals until their influence is felt everywhere.

HOW TO REACH THE PEOPLE.

Perhaps my honored fellow-laborers will bear with me and not misunderstand me if I touch another topic. Let me introduce it by a question. Do we, who deliver addresses and lectures on Christian evidence and Christian philosophy, seek with sufficient earnestness to render our arguments intelligible to the common people? After one of the lectures in one of our courses in the Broadway Tabernacle, as I walked down the street with a young man of rare abilities, who had studied in Germany and in the East, he put this to me after the following fashion: "You gentlemen are very earnest, but I cannot help contrasting you with the greatest and most famous lecturers on physical science. When they come before popular audiences they do not descend to clap-trap but they employ the choicest yet clearest language to make what they say not only understood by the plainest hearer but interesting to him. Some of your Institute's lecturers do not seem to see the necessity of that. The lecture to-night was very able. I believe that I understood what the lecturer meant in every sentence, but it was because it was in the line of my studies. I do not think that more than one in twenty of the persons present felt the force of the argument. It was written accurately in the high technicalities of philosophy, but it could have been stated in plain language with no loss of force."

Shortly after this American view of the case there was an English presentation of the same idea. The Rev. Henry Footman in his book, entitled "Reasonable Apprehensions and Reasonable Hints," seemed much impressed with the faculty possessed by the leaders in the Hall of Science in London, for presenting the agnostic philosophy of Spencer and Mill, and the so-called "higher criticism" of Germany in such a form that it is not only intelligible but attractive to the uncultivated mass of the East-End. This is worth pondering. *Fas ab hoste doceri.* The American Institute must at its Monthly Meetings and in its Summer Schools and in its publications afford the opportunity for the utterance of the most profound researches in science and philosophy by the ablest thinkers in Christendom. That will

be considered by many as its first function. But beyond that, can we not induce our strongest men, the men whose ability and eminence are universally acknowledged, with their mastery of the subject, to go before the people, the busy people who have no time for high study, and present to them the deepest truth in the plainest words and make that truth still plainer and more winsome by illustrations captivating to their fancies? If, for the sake of their scientific hypotheses, the gentlemen of the physical science department can do this, cannot our great and gifted men, for Christ's sake and the truth's, carry the highest thoughts to the lowliest minds in such ways as shall make the angel's visit welcome to the peasant's hovel? There seems to be a rich field open to some great man who is great enough to be as great in a valley as on a mount, who shall be able to speak so that all the masters of all the schools shall be bound by the spell of his power and learning and yet feel that it is not a condescension but an honor to give the truth to children and child-like men, who shall be able at once to lead the music of the choirs invisible and to show shepherds how to find the Redeemer.

"THE LIBERTY OF PROPHESYING."

But, in this day when such large claims are made for "the liberty of prophesying," it may be well to give heed to some of the conditions and limits of this liberty.

Studious men have fancies, whims, suggestive ideas perpetually floating through their brains. These will ordinarily relate to the subjects of their studies. Faraday, one of the most practical of scientists, although he was never misled by fantasies, found his brain teeming with them. Those notions that seem most consistent with the knowledge already attained, or to have some possibility of being, at least, essential to the circle of settled science, are to be held a moment that the thinker may examine them, in order to ascertain whether it is worth while to examine them still further, with a view to forming an opinion. Perhaps one of each hundred may be found worthy this honor.

But opinions are one thing and beliefs another. A fair, earnest, industrious thinker, who is patient withal, and who is too self-loving to be self-deceptive, will be very cautious how many of his opinions he allows to ascend to the plane of belief.

He is a very prosperous worker in the mine of thought who finds one in each score of his opinions worth the name of a belief; and he is an opulent teacher who knows, or is entirely sure, that one in each dozen of his beliefs is really and truly a doctrine.

There never was a time when teachers of science and religion were more called to keep these distinctions in view than the present. An opinion is not a hypothesis, and a hypothesis is not a theory, and a theory is not a doctrine, in any department of science, physical or mental. It requires more than one opinion to make a hypothesis. Before it can become the accepted theory a hypothesis must be worked on so long that no other hypothesis on the subject can be accepted; and a hypothesis may be worked until it produce a theory which is destructive of the parent hypothesis. A theory must come into general acceptance among teachers in the department to which it belongs, before it can be promulgated as a doctrine. The hypothesis has no other foundation than "suppose." It says, "Suppose A were B, what would C be?" It is always answered by another "suppose." Thus: "Suppose A were *not* B, what is C then?" Or, "Suppose A were Z, what then?" But theory cannot be so easily set aside. It must be shown to be unreasonable or defective in that it does not meet the facts that are known. The hypothesis is the vessel which holds the pearls of facts; the theory the string on which they are strung.

Doctrine is something higher, more important, and more solemn. It is what a man must teach if he teach at all. In science a man may or may not teach; it is a matter of choice. But when he does teach he must remember that just as great a proportion of people must take their scientific teaching *on authority*, without investigation, as must take their religious teaching. So he is bound to tell them when he is enunciating an opinion, when a hypothesis, when a theory, and when a doctrine.

The public teacher who expects to win the reputation of trustworthiness in the department of science must be very careful how he advances sudden suggestions or even well-weighed thoughts as science. He may discuss them esoterically, with other scientific teachers, until satisfied that they are opinions

worth uttering to the public or to the classes committed to his charge. Even when so satisfied he must be very careful to call attention to the fact that he is only expressing *his opinion*, and is not teaching *science*. He may so speak his opinions as opinions, and he may set forth hypotheses as hypotheses, and theories as theories, but he must be careful not to insist upon these as settled doctrines of the Scientific Catholic Church.

PHILOSOPHICAL CANT.

Perhaps, also, we cannot warn one another too often of the danger of falling into "cant." In philosophy and in science it is just as easy to acquire the habit of using words which have been emptied of their meaning, as it is in religion.

Into our modern philosophical discussions has come the word "unthinkable." It is of such frequent use that it might be well to ask those who so often take refuge under it as a shield when they are attacked, and so often hurl it as a javelin against any statement they oppose, what they mean by it. Do they mean "inconceivable"? But "conceivability" is not held by metaphysicians as a criterion of any truth which can be proved, and there are many things accepted by all classes of thinkers as true which are not conceivable. The expansion of space infinitely is inconceivable. So an interminable series, so the approach of asymptotes. Is there absolute knowledge of any kind that is "thinkable" in the sense of being "conceivable?"

How could any proposition be declared unthinkable unless it had been thought somehow? The agreement or disagreement of the terms of a proposition may be declared axiomatic, or demonstrable, or probable, or possible, or impossible, or absurd, but there must first have been thought of the meaning of the terms, and thought of the statement of the agreement or disagreement of the terms, but nothing can be declared in this sense "unthinkable" until after it has been thought; a process which would prove it not unthinkable.

But in regard to any proposition, suppose that two men state, the one that to him it is thinkable, and the other that to him it is unthinkable; which is to decide, or who is to decide? A might say to B that B could "think" it if he would, and the retort of B might be that A was wholly mistaken, and that, assuming his truthfulness, he only thought that he thought it.

Can any man go further than to say that *he* is not capable of "thinking" it? But suppose a million of men, or many millions, should asseverate that a proposition was unthinkable to them, that would not prove it unthinkable absolutely; nor would it be proved, so long as there existed a single intelligent personality who had not been heard from on that subject. Nor would the unanimity of the race now existing establish the unthinkability of any proposition. To Lucretius it would have been "unthinkable," in the sense in which the word seems to be often used, if in objection to his corpuscular theory he had been told that there is no "up," and consequently no "down," in the material universe. With our cosmical ideas the absence of "up" and "down" is very plain. If he had heard the statement, and had said "that is unthinkable," he could only have meant that it seemed impossible for him to co-ordinate it with his conception of the universe, and so it was. After all, is not that what is really meant by this expression, as it is now generally used? If that be all, why is it not so stated? Is it not arrogance to assume that any man knows what can and what cannot be thought? When any man says of any idea that it is unthinkable he virtually asserts that his intellect is the measure of all human capability. Those who are fond of the phrase are probably so persuaded, but if that be true it unfits them for every office of teacher of either philosophy or ethics. It sounds like the protest of the imbecile, or the brag of the bully.

Then, there is the word "unknowable." It is ordinarily employed with a capital initial, to represent what would stand for God if the writers were compelled to admit that there is such a thing or being as God in the universe. Manifestly this is what they do not wish to do. The connections in which the word occurs show to those who look below the lines the secret desire which is embodied in a masked argument to prove that there is no personal Creator of the universe. The intimation is that we can never know whether there be such a God or not, and therefore, for all practical purposes of science and philosophy, men may as well go on the supposition that there is no God. This sly process finds some acceptance made for itself in the universal consciousness of mankind of inability to comprehend God. But

in this sense every particle of matter is as unknowable as God. The nature of matter in its essence was just as well known to the first man as to any man, to the untutored Bushman as to any professor of science in any university; and the fact that our progress in science and philosophy through the ages has brought no man nearer than any other man to a knowledge of the nature of matter, while all men have always known the fact of its existence, and many men have learned much of its many properties, should cause all thinkers to perceive that a denial of the existence of God and of our capabilities to know His attributes because in His essence He is unknowable, and so make one word which is true of one concept and false of two others stand for all, raises *prima facie* evidence of philosophical unfairness.

WORK OF THE INSTITUTE.

Although all the members have been duly informed of the doings of the Institute since our second anniversary, it may be well to make a condensed statement.

The sixth course of lectures was delivered in the Broadway Tabernacle, on successive Tuesday evenings, beginning with the 20th of November, 1883. The following is the syllabus of the course: Benjamin N. Martin, D.D., Professor in the University of New York: "Design in the Elementary Structure of the Universe;" Rev. A. H. Bradford, A.M., Congregational Church, Montclair, N. J.: "Heredity, Environment and Religion;" Charles F. Deems, D.D., LL.D., Church of the Strangers, New York: "A Defence of the Superstitions of Science;" Jesse B. Thomas, D.D., Brooklyn, N. Y.: "Darwin, Emerson, and the Gospel;" Edwin Harwood, D.D., Rector Trinity Church, New Haven: "Revolution in Theology."

The Institute has also had seven monthly meetings in the City of New York since our last Anniversary. October 25th: A paper by the celebrated Assyrian explorer, Mr. Hormuzd Rassam, of London, England, was read by Rev. Dr. S. M. Hamilton, on "The Lands of the Bible, Ancient and Modern." This was followed by criticisms prepared by Rev. Dr. Crosby and Prof. Brown. January 31st, 1884: Rev. Dr. Wm. H. Platt, of Rochester, addressed the Institute on "Herbert Spencer's 'Data of Ethics.'" February 28th: Rev. A. H. Bradford, of Montclair,

N. J., delivered an address on "Some Questions concerning Heredity, Environment and Religion." March 27th: Rev. Geo. A. Gates, of Upper Montclair, N. J., read a paper on "Evolution in its Relations to the Fall of Man." April 24th: An address was given by Mr. C. Bjerregaard, of Denmark, on "The Psychological Value of Mythology in Apologetics." The last address of the season was given in the Church of the Strangers, May 29th, by Baboo Ram Chandra Bose, of Lucknow, India.

"CHRISTIAN THOUGHT."

As many of these lectures and papers as could be admitted by reason of its limited space have appeared in CHRISTIAN THOUGHT. This periodical, which is the only official organ of the Institute, has been so small as to render it insufficient for our purposes. The Executive Committee have adopted such measures for its future publication as will render it more available. It is to be increased by nearly a hundred pages to the volume and to be issued from the Rooms of the Institute as a Bi-Monthly periodical. This will enable us to bring out more lectures each year and have space for other matter of a more popular character. Thus both the members of the Institute and those who not being members are subscribers to the periodical will be greatly benefited.

The Institute has distributed, during the year, over 20,000 copies of different publications in its own name, and has caused many important and popular items and articles to be inserted in religious and secular journals as antidotes of poisonous errors.

THE LATE PROFESSOR MARTIN.

The Institute has been sorely bereaved by the decease of Professor Benjamin N. Martin of the University of New York. Those who were at the Summer School of last year will recollect how his learning, wisdom and modesty charmed all who met him and added to the pleasure and profit of the School. He was becoming deeply interested in the Institute and was invaluable as an adviser. He would have been on our Executive Committee if his valuable life had been spared. His latest public performance was a lecture delivered in our course last autumn, and his last appearance in public was to offer prayer before another lecture in that course. His departure makes a loss which is

deeply felt by the officers of the Institute. May other friends be raised up to take his place.

FINAL WORDS.

It is not necessary, I trust, to urge members of the Institute to make efforts for its advancement. There are so many ways in which each can help the officers who are doing so much unpaid work for which every member is as much responsible as any officer. Printing, postage, clerk hire, lectures, must be paid for. The officers can go no further than the funds justify. Let each member this year secure just one other member for the Institute and one subscriber to CHRISTIAN THOUGHT, and while there is no discouragement at this Anniversary, there will be a great exhilaration at the next.

Personally allow me to thank my brother officers for their kind forbearance with me and for their generous expressions of confidence during the year which has closed, and to renew my solicitation that they endeavor to procure the services of some gentleman who can bring to the presidency abilities and learning which will give greater aid to the Institute than—I may say without affectation—I feel that mine have done.

BISHOP RYLE.—At a large meeting recently held at Exeter Hall, London, the Bishop of Liverpool remarked that he did not think that there was any more infidelity amongst the working-classes than there was amongst the rich. "My own belief is," he said, "that there is far more dangerous skepticism, far more dangerous agnosticism, far more dangerous argumentative infidelity going forth from our universities than there is amongst the working-classes at this day." He seems to think an immense amount of good could now be done amongst this class in London, if the right kind of men could only be procured; and by the "right kind of men" he says he does not mean "curates that cannot talk anything unless they have got a surplice on their backs and a Prayer Book in their hands, but men who can talk in the streets, who can stand on a tub—men who can get up in a room without any pulpit, and just talk with only a black coat on their shoulders, and tell the people the story of the Cross."

HINDU PHILOSOPHY AND CHRISTIAN, CONTRASTED.

[A Lecture delivered before the Summer School of Christian Philosophy, Key East, N. J., July 18th, 1884.]

By Baboo Ram Chandra Bose, Lucknow, India.

IT is our intention to set forth the contrast between the vital doctrines of Christian Philosophy and those of Hindu Philosophy. But before we do so it is desirable to offer a remark or two on the ingenious way in which the sombre character of Hindu Philosophy is explained. Hindu Philosophy is Pessimism. It begins with a recognition of human sorrow, goes out in vain in quest of a proper remedy, and ultimately arrives at annihilation as the goal where human misery terminates only in the extinction of life. Even Schöpenhauer does not speak of the phenomena of life in terms more lugubrious than those which form the prominent features of the phraseology and nomenclature of philosophy in our country. How is its gloomy character explained?

According to Max Müller the Greek intellect was the very antipodes of the Hindu intellect. The Greek was sensuous, of a volatile temperament, alive to the varied charms of the world of the eye and the ear, and absorbed in its occupations and pleasures. His intellect was vivacious, but not profound; ready to catch the significance that lies on the surface of things, but unable to apprehend the deep meaning that underlies it; while his earth-born impulses drove him toward the present business of life and its ephemeral enjoyments. He therefore distinguished himself as a man of business, a statesman, an orator, a dramatist, an artist, a son of Mars, or a devotee of pleasure; and he failed to unfold and expound the deep meaning of the universe or the recondite truths of philosophy. The Hindu, on the contrary, was highly intellectual, insensible to external charms, and averse to the grovelling realities of sense and the commonplace incidents of life. His intellect was deep, and led him to penetrate

instinctively beneath the surface of external nature, and to bring out the jewels of profound truth hidden in its inmost recesses; while his feelings, chastened by domineering intellectualism, tended to draw him away from the busy scenes of life, with its monotonous round of occupations and pleasures. And therefore he failed to distinguish himself on the busy theatre of worldly success and worldly renown, and succeeded only as an ascetic thinker and recluse philosopher. This contrast can be very beautifully drawn out from universals to particulars, from the region of magnificent generalizations to that of petty details. There are, however, some facts incompatible with the assumption of such a sharp antithesis between the intellect of ancient Greece and ancient India. It is a matter of fact that the generality of people in India were, as they are now, as thoroughly immersed in the avocations and pleasures of life as the generality of people in Greece; while in that favored cradle of taste and artistic beauty schools of philosophy were not wanting wherein the deep problems of life were as earnestly and as fruitlessly pondered and analyzed as in India. The peculiarly gloomy type of Indian Philosophy cannot be satisfactorily explained by a reference solely to the intellectual differences pointed out by scholars like Max Müller.

Nor will the specious theory propounded in Buckle's "History of Civilization in England" of itself account for the peculiar type of intellectual development noticeable in Hindu Philosophy. Buckle traces all the ethnological peculiarities by which one race is distinguished from the others to the omnipotent influence of physical causes; and, according to him, food, soil, climate, and general aspects of nature are enough to explain the idiosyncrasy of Hindu Philosophy, especially as it was elaborated in a country and at a time where and when man had not learned to modify nature, and was therefore irresistibly propelled by its laws and forces. Our Aryan ancestor had in the country a rich soil, and much labor was not needed on his part to make it yield enough for his sustenance. He was, moreover, temperate and abstemious; and his diet, being simple and spare, combined with the enervating influences of a tropical climate in making him indolent and sluggish, prone to fruitless meditation, and averse to the

stirring incidents of an active and busy life. Nor were the general aspects of nature in the plains fitted to magnetize his intellect, during especially the time justly called the season of universal lassitude and languor. This beautiful theory might be adopted but for one serious objection, besides the one which nullifies Max Müller's representation of the opposite tendencies of the Greek and Hindu intellect. It is a matter of fact that these identical physical causes did not prevent the Rishis of the Rig Veda times and their followers from leading a life very much like that of the ancient Greeks, and in marked contrast to that of the philosophers whose excogitations assumed so gloomy a form. It may be said that the physical causes enumerated by Buckle had not produced their legitimate fruits among the Aryans of Rig Veda times, who, having come from a colder climate, retained that mental activity and bodily vigor which were impaired gradually under the tropical heat of our country. But it must not be forgotten that this era of vaunted purity was long enough to give the climate a fine opportunity of displaying its disastrous power in deteriorated physique and enfeebled intellect, the interval between the composition of the earlier hymns and later ones being admittedly no less than a period of three hundred years. It should, moreover, be borne in mind that the Brahmana period, almost equally long, and separated from it by an interval of at least two hundred years, presents the same picture of devotion to sensuous enjoyment which we find depicted in the Rig Veda.

The truth is, no single theory cut and dried can of itself satisfactorily explain the peculiar bent of the Hindu intellect, and the sombre type of the philosophy to which it gave birth. A variety of conditions tended to give the one its introspective character and the other its dark color. Food and climate had their appreciable influence, but they did not constitute the sole cause of the unique effect. The theocracy established by our Aryan ancestors, so obviously fitted to lead to political inaction by burking independence of thought and freedom of speech in matters affecting the interests even of this life, combined, with the absence of that spirit of scientific inquiry which the ancient world rarely if ever saw evoked in its vigor and enthusiasm, to breed in the Indian philosopher his habit of morbid introspection, and give his spec-

ulations a gloomy character. His intellect was too lofty to allow him to rest content, as common minds do, with the petty concerns of life; and as he was driven away from its nobler objects and ambitions by the very constitution of the society of which he was an integral part, he had to fall back upon himself for the exercise of those powers of which the world around him refused to make a proper use. He made himself the subject of his study and meditation, and the gloominess he saw within himself was by an easy transition transferred to the picture he drew of human life and the conclusions he based thereon. The Greek philosopher, who had a grand theatre of activity opened for him in a healthier political atmosphere, looked *out of himself*, and made happiness the object of his search; while the Hindu philosopher, cut off from such stirring scenes, looked *within himself*, and made extinction of pain the object of his life and thought. His philosophy was emphatically *esoteric*, or *subjective*, while that of his Greek brother was on the whole *exoteric*, or *objective*.

To return to the great object of this paper—to show that in all important features the philosophy we have been trying patiently to unfold is the very antipodes, not of ancient Greek philosophy, which was its reproduction in some respects and its counterpart in others; not of the boasted modern philosophy, in which almost all its important doctrines are revived and presented in fresh garments, but of the philosophy of the New Testament. This antithesis or antagonism will be manifest if we take into consideration its descriptions of (1) God, (2) Creation, (3) Providence, (4) Man, (5) his Duty in Life, (6) the Source of his Present Degradation, (7) his Salvation, and (8) the Prospect before him.

1. To begin with God. According to Hindu Philosophy, God is a nonentity. One, the very first of its six orthodox schools, declares Him non-existent, and opposes a series of arguments, ingenious though inconclusive, to those brought forward by common-sense to prove His existence. The other schools, however, thought fit to abandon its attitude of rank atheism, and substitute for its appalling negation a Being wrapped up in grandiloquent phraseology, but destitute of any quality fitted to determine it or discriminate it from nothing. God, when kindly

allowed to exist, is without power, without intelligence, without feeling, without material properties and spiritual attributes, or, to speak philosophically, without power, without qualities, and without relations. He is the Pure Being of some schools of Greek philosophy; but as, according to no less a philosopher than Hegel, *Pure Being equals nothing*, He is a nonentity. Ancient philosophy labored, not only in India, but in all famous centres of speculative thought, to reduce God to nothing; and such phrases as "the Eternal Void," "the Everlasting Night," etc., were most ingeniously invented to set forth His real nothingness under a cloud of high-sounding words. And modern philosophers are simply following their example in their attempts to maintain the nothingness of God behind an array of imposing technicalities. According to them, God is the Absolute and the Unconditioned. If these technical expressions mean anything, they represent God as Pure Being and nothing more—that subtle, impalpable nonentity which defies every attempt to determine it or give it something like a definite shape. God again is the Infinite, and as such He fills all states and pervades all conditions. He cannot be existent, for were He so He would be out of the condition of non-existence. He cannot be omnipotent, for if He were so He would not fill the state of parvipotence. He cannot be perfect, for imperfection is a condition He must pervade as well as perfection. This miserable Being, hanging between life and death, power and weakness, moral excellency and moral turpitude, indeterminate, undefinable, out of relation to all things, yet the fountain of creation, is the God of modern philosophy. Better by far the idol of the semi-civilized man, which represents some hero of bygone age, who to a host of vices added at least a few virtues! Better by far the fetich of the savage, which is in his opinion instinct with life and armed with power, and which when propitiated is believed able to protect the worshipper from some tangible danger or calamity!

The God of the Bible is not such a Being. He is not an inscrutable force, a nondescript power of natural selection, a mass of potentialities, a blind, self-evolving principle acting under an iron necessity immanent in or foreign to it. He is a Person, intelligent, voluntary, infinite in power, wisdom, and

holiness. He pervades creation, and is at the same time above it, immanent and transcendent, intramundane and extramundane. He is not merely the Creator and Upholder, but the Ruler and Governor of the universe. He loves and hates—loves order, harmony, righteousness; hates disorder, disharmony, and unrighteousness. He has not, therefore, that sentimental weakness which unfits a ruler for the sterner elements of his vocation. The consistency of the Bible picture of God, drawn by different hands in different places and at different times, under endless varieties of circumstances, and presented in diversified modes—now in a series of providential dealings, then in denunciations of an appalling nature, and anon in exhortations and appeals which are fitted to melt the hardest heart or bedew the driest eye—is a standing miracle; while prophetic announcements of what God is to do combine with narratives of what God has done in upholding that perfect character of severity and tenderness which nature, through its beneficent and destructive agencies, gives to its Author.

We do not wish here to insist on that crowning revelation of God which is the characteristic glory of our holy religion, His revelation in Christ Jesus, in whom He is brought down to the level of our comprehension more than in natural phenomena and providential dealings, and in whom therefore He is presented in the only form in which it is possible for us to know, love, and serve Him. Nor do we wish to dwell upon His great work, in which both the sterner and milder features of the divine character are brought into bold relief, and which therefore is pre-eminently fitted to discourage sin, and at the same time encourage the sinner to come where pardon, peace, and joy are held in reserve for him.

2. Let us next contrast the notion of creation embodied in Hindu Philosophy with that presented in the Bible. There is no such thing as the *ex-nihilo* theory of creation within the compass of Hindu literature in general, or philosophy in particular. The maxim *navastunovastusiddhi*, which is the Sanscrit version of *ex nihilo nihil fit*, underlies, runs through, or permeates all the grotesque cosmogonies associated with it. The Sankhya school assumes a self-evolving material principle called Prakriti, and

evolves creation out of its trinitarian substance. The Yoga school adds God to its categories, but the being whose existence is postulated is a nonentity, and has consequently nothing to do with the creation, preservation, and destruction of the world, all which operations are left exactly where the Sankhya school leaves them, hanging on the potentialities of its primordial principle. The Logical schools have a God equally passive and quiescent, equally devoid of power, quality, and relation; while the origination and preservation of the universe are left in the hands of a mysterious and irresistible force called Adrishta, which has atoms of various kinds as its working material. And these four schools concur with one another in maintaining the pre-existence of souls and rendering them useless appendages by forcing them out of all power, quality, and relation. The Mimansa throws all questions of a recondite character into the background, and seems to maintain the eternity of the world along with the Vedas; while to its champions it is a matter of perfect indifference whether God exists or not. And finally, the Vedantic system in its earlier forms evolves creation out of the substance of God, modified according to its exigencies, and in its later forms represents the whole universe as a gigantic dream.

In marked contrast to all this, the Bible represents God as the Creator of the world, of its substance as well as of its form; as the Personal, Intelligent, and Voluntary Agent who brought entity out of nonentity, things that appear out of nothing; not as the Architect who builded up the universe out of pre-existing materials. The Bible does not compel us to oppose the modern theory of evolution; but according to it the process begins with an act of creation thoroughly *ex nihilo*, and progresses in a line, not uninterrupted by fresh acts of direct intervention, under the guidance of infinite wisdom, backed by unlimited power and infinite goodness. The idea of creation, or something brought out of nothing, is as distasteful to modern scientists as it was to our ancient philosophers; and that because it is inconceivable. But it is forgotten that the theory of spontaneous generation, or of life coming out of dead matter, or that of thought springing out of slime, is equally inconceivable. And if we have to swallow the one theory, we may as well swallow the other!

3. God, according to Hindu Philosophy, is a nonentity, and therefore cannot rule or provide for the exigencies of life. He is in the same predicament with an idol of stone—nay, decidedly worse off. The idol of stone has eyes, but it sees not; ears, but it hears not; a nose, but it smells not; but it consists of some material of which a proper use may be made. But the God of philosophy is a phantom, and has no existence beyond the compass of an imagination prone to frivolity, though not destitute of creative power. How is it possible for Him to govern, to control the laws of the material world, guide human volitions, and regulate the complicated machinery of life? He is therefore very properly thrust into the background; and a material form such as Prakriti, or metaphysical phantasms such as Karma or work, Maya or illusion, are posited to regulate the evolutions of providence. Modern philosophers have not been slow to follow the example, and such fantastic creations of a prurient imagination as Natural Selection, Kosmos, Moral Order, Thought, Idea, etc., have been pressed into service, clothed with gubernatorial powers, and placed at the head of the economy of providence. The scientist substitutes his immutable laws for these intangible chimeras; but he does not see that, apart from a moving or a regulating power, they are as chimerical as the subtlest phantasy conceived or invented by the spirit of metaphysical refinement or generalization.

God, according to the Bible, is the Author of Creation and the God of Providence. Nor is His government general, confined to operations and events which are invested with peculiar importance and glory by human beings. His government is minute, particular, or individual, and it comprehends all material movements, from those of the largest heavenly bodies the advancing light of which has not yet reached our globe, down to those of a mote scarcely visible in a bright ray of light; and all events, from the political convulsions by which great empires are shaken to their centres, or sanguinary wars by which their boundary lines are extended, down to the pettiest occurrences of the most prosaic of lives—the life say of a shoeblack or a chimney-sweep. "Are there not two sparrows sold for a farthing? and one of them shall not fall on the ground without your

Father. But the very hairs of your head are all numbered.' Some theistic philosophers are willing to allow a sort of general government of the world and its concerns by God, but they revolt from the idea of representing Him as condescending enough to take an interest in the dry details of every-day life, or in local idiosyncracies and individual peculiarities. These persons, however, forget that, as great things are often evolved out of little things, there can be no government at all unless the *minutiæ* of life are included, and that our petty distinctions between great and small are not recognized in heaven. Alexander Vinet refers, in one of his very suggestive discourses, to an event in the life of our Lord eminently fitted to show that Heaven takes special notice of many things passed over by us as uninteresting and useless. While His disciples were wrapped in admiration of the great buildings of Jerusalem and its magnificent temple, together with multitudes of rich and well-to-do people passing to and fro in processions more or less pompous, His eyes were fixed on the poor widow who cast into the treasury of the Lord all her living!

4. Let us now advert to the picture of man as presented in Hindu Philosophy and that presented in the Bible. Man, according to Hindu Philosophy, is either a lump of matter, or a particle of the divinity, or a mere dream. His dualistic nature is admitted apparently in the Naturalistic and Logical schools; but the soul to which his body is attached is devoid, like the God generally admitted as existent by their champions, of power and quality, and really, if not apparently, thrown out of all relation to things heavenly as well as earthly. The soul is doubtless said to be related to the body or to nature in general through its material organ, the mind, and is represented as witness of its sufferings and ruler of its movements. But such representation is meaningless, as its ability to see and rule is emphatically denied; and it is moreover neutralized by counter-representations, which make it the passive and unfeeling recipient of impressions made upon the mind by mischievous Prakriti, both pleasurable and painful. But may not its proximity to nature, such as makes it seem active and impressionable when it in reality is thoroughly passive and impassible, suggest the idea of re-

lation? But its proximity to nature, after having been posited and made the basis of many a weighty conclusion, is emphatically denied. Both its entanglement and emancipation are declared fictitious, not real! The soul, therefore, being set aside, all that remains of man is the body, a lump of matter moved by a law over which he has no control whatever. The Vedantic school converts this lump into a particle of the essence of the divinity, or one of its modes. The question, How the infinite becomes the finite? is not categorically stated and perspicuously treated of; but the theory of self-diremption is in a somewhat clumsy manner elaborated in the later documents of the system. That the infinite is modified in all its infinitude, now into a material form and then into a spirit, may be the import of some passages at least in the Upanishads and the Brahma Sutras; but later expositions of Vedantism ascribe to the deity an almost endless divisibility, by virtue of which one portion remains absolute and unrelated, and others are endlessly divided and subdivided into the innumerable realities of life, both material and spiritual. But the dualism or rather multeity involved in such endless emissions and modifications of the divine substance is obviated by the Maya or Illusion Theory, which represents everything, spiritual or material, as unreal besides God—the real unity mistaken for variety. According to this last refinement of speculative thought, man is an illusion, or an unreal mode of divine existence!

But whatever man is—a modification of the infinite in its entirety, a particle of the divine essence, or an illusion—he is not essentially different from the brute that perisheth, or even from inanimate matter. According to Hindu Philosophy in its later manifestations, the inferior animals have souls as well as man, and the precedence the lord of creation might legitimately claim is the superiority of degree rather than of kind. He is, moreover, not generically different from particles of matter, as each of these either is or has a particle of the universal soul latent in it. Nowhere is the modern theory of continuity carried to such perfection as in India!

Man, according to the Scriptures, is the crowning apex of the pyramid of creation in this nether sphere. He is *dualistic*, consisting of body and soul, indissolubly, or all but indissolubly

united. Some Christian philosophers maintain that the body and the soul united in man form a third substance, a *tertium quid;* but though this theory may justly be represented as suggesting a chemical fusion inconceivable, the sharp lines of distinction by which the one is separated from the other are by no means sanctioned by the Scripture representations of man. According to these, man is a dualism, the relation between his body and soul being permanent, and involving interpenetration and constant interaction; and the current belief in a Hades peopled with disembodied spirits needs, in the opinion of some eminent Christian philosophers, correction. Man is intelligent, and his intelligence is not either a particle or a mode of the Divine Intelligence. There are even among Christians habits of thought and expression to which, when not properly explained, serious exceptions may be taken. The relation, for instance, between a cause and effect has been, it is to be feared, pressed too far by some Christian writers in its parallelism to that subsisting between God and the universe. It is affirmed that, as the effect must be potentially in the cause, intelligence and free agency in man must potentially exist in God. But it is not perceived that such language tends to make human intelligence and will, in all their weakness and perversity, simply modes of the unerring intelligence and the absolutely uncontrolled and uncontrollable will of God; and that, as divine attributes are inseparable from the divine essence, an identity is established between the nature of God and the nature of man. We Christians believe in a sort of anthropomorphism, not in pantheistic unity between God and man; and the Christian position is that man was created in the image of God—that is, clothed with intelligence, power, and free agency similar to but not identical with these elements of the divine nature. We have by anticipation already stated that man is a free agent, and as such a first cause, capable of setting in motion lines of second causes within certain limits and under certain conditions. But is his free agency absolute and uncontrolled? Some Christian theologians maintain that his will is absolutely free, while others admit some degree of control, not only in the region of action, but in that of volition also. But happily they all concur in maintaining that man is responsible

for his thoughts, words, and deeds, even when they are placed under the control of God and are made subservient to the grand purposes of His government. Christianity upholds divine sovereignty and human responsibility without pointing out the line in which these two apparent contradictions, or, to adopt a well-known Kantian phrase, antinomies, meet.

5. We now come to man's duty in life. Representations of this embodied in Hindu Philosophy are low, and fitted to demoralize him. His aim, according to them, is personal and selfish—his own deliverance from pain. The Hindu philosopher is pre-eminently subjective, but his views of pain are characterized by an objectivity inconsistent with the general tenor of his philosophy. Among the varieties of power from which deliverance is described as desirable and necessary, those of an external character, viz., pains of the body resulting from impurity, disease, and death, or from the inclemencies of the weather, or from the malignant influences of evil stars, or from the cruelty of demons and hobgoblins—occupy the most prominent place; while the excruciating mental sufferings attendant on sinful dispositions and vile passions are rarely, if at all, referred to. The great Buddha attributed the awful amount of suffering noticeable on the surface of the globe to birth, old age, disease, and death; and the grossness of conception he displayed on this head is characteristic of Hindu Philosophy in general. It was, in short, derived from one of its systems, and gave its color and complexion to those elaborated after that reformer's death. Be this as it may, the aim of the Hindu philosopher is essentially selfish: his own deliverance from pain in its varieties of ghastly forms. That of the Greek philosopher was by no means higher, his *summum bonum* being happiness. An aim so selfish cannot but lead a man to concentrate his attention upon his own self, to be self-centred and self-absorbed. Under its influence he makes self the centre of his thoughts, feelings, and desires, and all his schemes and projects revolve around it as their pivot or pole. Is it possible for a person to be thus absorbed in self without being degraded and debased, enfeebled in mind and vitiated in soul?

Man's duty in life is, according to the Bible, to glorify God, his Maker, Preserver, Ruler, and Redeemer. Christianity requires

him to renounce and mortify self, and make God the centre of his thoughts and feelings, the goal of his plans and projects, the end, in a word, of his existence. Self-deliverance, self-improvement, or self-glorification is not to be made the aim of life, though these blessings are sure to crown his efforts to serve God with a singleness of eye to His glory. He is delivered from sorrow, exalted and glorified, not because he seeks with all his heart his own beatification, but because his life is unreservedly devoted to the adoration and service of Him by whom he has been redeemed. Nay, in proportion as his mind is withdrawn from selfish aims and purposes and set "on things above," his sorrow of heart disappears, his thought becomes exalted, his feelings purified, and his soul made instinct with an abiding sense of peace, triumph, and gladness. The true philosophy of happiness is with him, and him alone. Happiness flies the more it is sought, and the Greek philosopher who eagerly pursued it as the sole business of life found it receding from his grasp in proportion as it was run after, and was ultimately covered with disappointment and shame, as the alchemist in the Middle Ages in his search after the philosopher's stone or the elixir of life! This was also true of the Hindu philosopher, whose pains multiplied in proportion as he sought deliverance from them, and who therefore was forced to make self-annihilation, in the literal sense of the term, his *summum bonum*. The Christian, however, by following the principle "not enjoyment and not sorrow," does succeed, in a pre-eminent degree, in securing the one and fleeing from the other.

But how is man to glorify God? By properly and conscientiously doing his work, not certainly by fleeing from the world. His work will become manifest if we take into consideration the position he occupies in this nether creation. He is, in the first place, a king, and as such he is to subdue the world, to people it, to develop its resources, and to make all within his power subservient to the varied purposes of life, the higher as well as the lower. He is, in the second place, a Prophet, and as such he is to observe, reason, inquire, and investigate, and in this way to rise from the varied objects of nature around him and the events of providence to their correct ideas in the mind of God—the eternal repertory of truth in all its entireness and glory. As

a Prophet, man is to acquire and spread knowledge, and thereby to benefit the world and his own self. And in the third place, man is a Priest, and as such he is to bring all the precious things in his possession, and his own self as an offering to God, to be under His direction utilized in promoting the highest welfare of the world at large. This threefold duty presupposes a standing revelation and perpetual guidance on the part of God, and the full development of every side of his nature on the part of man; and it enables him to display, in what may be called the outgoings of his life, a beautiful union of piety with activity, devotion with philanthropy, the sublimity of contemplative retirement with the enthusiasm of practical humanitarianism. Man, therefore, glorifies God by making every force within and without him do its appointed work, and so prove conducive to the adornment of the inanimate and the enjoyment of the sentient creation.

6. But in the case of man the *quid est* is by no means the *quid oportc*. In his present condition he neither occupies the lofty position intended for him, nor performs the duty intrusted to him. He is obviously degraded very far below his *natural* station and vocation, despised by the meanest of those over whom he is appointed to rule, debased by error, enslaved by prejudice, brutalized by passion, and dragged into the lowest depths of shame and misery by a downward tendency, which has, in consequence of an anomalous state of things introduced by his own folly, grown with his growth, strengthened with his strength, and become almost omnipotent and irresistible. One cannot look at his present condition even cursorily without raising the question, What is the cause of his not merely obvious but most obtrusive degradation? Ignorance, says the Hindu philosopher; and his reply would not be far from truth if by ignorance he meant ignorance of God. Sin debases and ruins us by darkening our views of God, and thereby leading us to commit the twofold error of withholding confidence from Him and placing it in our own selves. The history of the fall illustrates the way in which moral apostasy in man is initiated and consummated. Adam was induced to believe that the only restriction by which his freedom of action was curtailed was a hardship, not a blessing; and he most foolishly threw off all allegiance to a

Being who had resorted to a mean artifice to check his rise to a proper level, became his own master and guide, and grievously misdirected all the energies of his complex nature. Ignorance may be represented as the cause of man's present degradation and misery; and if the Hindu philosopher had, in his theory of ignorance, any reference to the repulsive views of God entertained by mankind in general, much might be said in favor of his position. But by ignorance he meant not ignorance of God, but ignorance either of the difference between the soul and non-soul, or of the essential identity of the ego, non-ego, and the infinite —that is, ignorance in either case of what is a palpable untruth, an ignorance which is bliss indeed! The Greek philosopher, especially of the Socratic school, also traced human depravity to the same cause—to ignorance of Duty, Moral Beauty, and subtle moral distinctions; to ignorance of the path of justice to be trodden, and the path of injustice to be avoided. But he failed to perceive, amid the cobwebs of his subtleties and refinements, that knowledge of duty is not in this life always associated with the power to perform it; and that, when not supplemented by grace from on high, it is neither a restraint to vice nor an incentive to virtue. The moral life of the philosophers of antiquity in general was, alas! a proof that the knowledge of virtue is but too often accompanied in this world with the practice of vice!

The Christian traces human degradation and misery to a deliberate and wilful transgression of a known law of God. Adam, the progenitor of the human race, became the author of sin by an act of disobedience deliberately committed; and his sin has, by what may be called incessant self-propagation, plunged into misery all his descendants, one alone excepted, because preternaturally introduced into the all but endless chain of life. The Christian believes in original sin; and science, after having laughed at it for centuries, finds it convenient now to uphold his belief to maintain the credit of its all-embracing theory of evolution and continuity. The Christian, moreover, believes that inherited sin is in every man of mature understanding aggravated by wilful transgression, and that, there being no one that sinneth not, all flesh is guilty before God. "There is none righteous, no, not one. There is none that understandeth, there

is none that seeketh after God. They are all gone out of the way, they are together become unprofitable; there is none that doeth good, no, not one." This sad picture is justified by every-day experience, and it sets forth the essence of sin as well as its dire consequences. The essence of sin is godlessness, of which even the man who fulfils the duty of social life faithfully and passes for a man of probity and benevolence is as guilty as the licentious wretch who has not what a brilliant writer calls "a rag of reputation." Ignorance of God, recoil from Him, distrust in His all-embracing goodness, aversion to what is good, proneness to what is evil, unrighteousness and unprofitableness are all consequences of sin, which therefore is the parent of all the degradation and misery which we see heaped up in the world.

Sin makes us miserable in two different ways. It in the first place separates us from God, the source of life, light, and joy; from that dependence without which liberty is but license; from that cheerful submission without which our will becomes stubborn and intractable; that communion without which the soul is bereft of its genuine enjoyment, and that grace without which true progress is an impossibility. It then darkens our understandings, vitiates our affections and passions, and proves thereby a source of ineffable restlessness and torment to our own selves, and to all around us. For, though its seat is the heart, it is perpetually issuing out in putrid streams of corruption in our life and conversation. The springs and fountains of life within are vitiated by it, and its outgoings cannot but partake of the corruption. The history of the world is the history of sin incarnated in words and deeds; and if the history of the human heart could be written, it would be the history of sin in its original form, in its naked ghastliness. Wilberforce's argument, that the existence and universality of sin may be proved by the same sort of argument which led Newton to his discovery of the law of gravitation, has not so much stress laid upon it in these days as it deserves. All nature combines with all history to prove the universality of sin, its early development, and its controlling power; and it is the height of unphilosophical temerity to deny its existence in the teeth of the universal ruin around us, or to speak of it in sentimental terms as "virtue in the making."

7. Now we come to the plan of salvation embodied in Hindu Philosophy. That salvation is, in the first place, not universal. It does not embrace in its broad sweep all races, nations, languages, and tongues, or overleap all geographical, ethnological, social, and chronological landmarks. Nor is this salvation the common property of the Hindu nation at large. It is, even within the narrow bounds of our own country, the monopoly of the few, not the heritage of the many. From it, as has already been indicated, all orders of society below the sacerdotal are mercilessly excluded. It is true that Kapila, the father of Hindu Philosophy, did strive to include in his scheme distinguished applicants from the lower orders, and even select members of the weaker sex; but his example, though backed by the mighty reform of Buddha, was not followed; and the exclusiveness by which philosophical salvation had been characterized became stereotyped. Again, the female sex in almost all its entireness is excluded from this salvation. Half the population of the country, therefore, and the greater portion by far of the remaining half, must pine away under the sweeping ban of exclusion. A sort of inferior salvation, with some temporal and temporary advantages, is reserved for them; and the hope of their rise in a future birth to the dignity of the priesthood, and therefore a share in the privilege of final emancipation, is held out. But their immediate exclusion is protected by a series of iron rules which nothing can break or even relax. But even of the Brahmin caste the majority are debarred from this grand boon. Only those Brahmins who have fitted themselves by a long and painful process of preparation, have successively performed the duties of the student and the householder, may aspire to the blessed exercises which result in emancipation. The narrowing process almost brings the privilege down to a point! Need we say that the Christian salvation is for all mankind, who are invited to accept of it *just as they are?*

The way in which philosophic salvation is attained is a way of thorns and briers—the rugged path of asceticism. Separation from family life or family entanglements, as the expression is; retirement to a forest, fasting, mortification, and penance practised for many a long year; and, above all, self-oblivious medi-

tation—these are the weapons of war, and the victory is literal annihilation of self. There is no harm in making one's own self the subject of one's meditation, provided the object is the ascertainment of truth. From the particular ego within we are led by subjective or introspective meditation to the Universal Ego without, from created intelligence to the primal intelligence, from the will of limited potency to the will of unlimited power. But such progress from the finite to the infinite is not the object of the Hindu philosopher. His object is to kill the varied states of the mind, thought, feeling, and volition; to paralyze the nerves and muscles of the body, and deaden consciousness by sheer inaction. But before this state of the positive death of the body and the mind is attained, the devotee is raised above the polarities of nature, and he cannot in consequence be affected by heat and cold, light and darkness, storm and calm. The instincts of his æsthetic nature are extinguished, and he sees no difference between beauty and ugliness, proportion and disproportion of form, harmonious and heterogeneous mixture of colors. His moral nature is extinguished, and he is raised above moral distinctions, virtue and wisdom being to him in no way different from vice and folly. It is a relief that he does not continue long in this state, and that absolute death comes apace to swallow up and remove from the possibility of doing mischief a mind so completely separated from its legitimate functions!

The salvation offered by Christianity is not dependent on our righteousness. Our vows and prayers, our devotions and meditations, our penances and mortifications cannot buy it. In its germinal state it is a gift bestowed upon us freely the moment we accept Christ as our Saviour by faith, and in its advanced stages it is matured and perfected by the spiritual nourishment we obtain by simply "looking unto Jesus." The theory of gratuitous salvation is a peculiarity of our religion, and appears to be the soundest philosophy, when we consider man's utter helplessness in spiritual matters, his inability to make an atonement for his past sins and transgressions, and effect within himself that radical change without which religion is a sham and an illusion; his inability, in a word, to make amends for past follies, to shun the bad and cleave to the good. The history of the world, of philos-

ophy and religion, proves to a demonstration that man can neither find God by wisdom nor save himself by work. Supernatural revelation and supernatural help are needed from Alpha to Omega to enable man to know, love, and serve God; and our heaven-bestowed religion embodies the one and shows the way in which the other is obtained and availed of.

The present result of this salvation, so gratuitously bestowed and so mercifully matured and perfected, is the complete development of man, or his development as far as possible under present circumstances. The result of Hindu salvation is not the subordination of his lower nature to the higher, not the evolution under proper culture of an exalted character, with varied excellences harmoniously blended, but the absolute extinction of his inner and outer nature. Greek philosophy oscillated between sensationalism and intellectualism; and its aim was, under the guidance of the Sophists, the extinction of intellectual life and the exclusive sway of sensibility; and under the guidance of the philosophers of the Socratic school a reversal of this process—the death of feeling and the exclusive sway of thought. Greek philosophy was, with reference to this and other matters, one-sided, while Hindu Philosophy may be described as *no*-sided. Christianity recognizes the undesirability and the absolute impracticability of the Hindu ideal, and holds an even balance between sensationalism and intellectualism. Asceticism has prevailed in the Church, and has by no means been an unmixed evil, its aim being not the extinction of human nature, but the due subordination of its lower to its higher element. But it must not be forgotten that asceticism was brought into the Church by heathen philosophy, and it has never appeared but in apparent disharmony with the genius of Christianity. The Christian principle is the development of *all* the elements of the complex nature of man, and we fully accept Buckle's *dictum*, that if the religious nature of man were exclusively developed and the other elements thrown out of culture, the result would be a monk or a saint, but not a complete man. Man has varieties of instincts which may be repressed, but which cannot possibly be extinguished. These are love of property, love of comfort, love of society, love of esteem, love of beauty, love of

knowledge. Human nature being diseased to the very core, it may be desirable under peculiar circumstances to suppress a few of these instincts, just as it is desirable in cases of bodily malady to abstain from proper food. And God may call upon us to hold a few of them in abeyance for the public weal; but it ought never to be forgotten that they are all God-given and heaven-implanted, and therefore sacred and inviolable. Properly cultivated and developed, they are sources of pleasure and improvement, as when ill-cultured and misdirected they occasion unutterable agony. Christianity does not stand up for their annihilation, but for their proper culture and development. Christianity therefore is not ascetic, nor anti-social, nor anti-economical, nor communistic, nor subversive of order either in human nature or in human society. It is the only religion that has encouraged and fostered culture of the broadest stamp—culture spiritual, intellectual, and æsthetic, culture of piety and humanity in their highest forms. The philosophy of the world extinguishes either the religious nature of man, or his longing after the infinite, or his social nature, or that principle of benevolence to which the amenities and charities of life are to be traced. But Christianity unfolds both these apparently antagonistic elements of his nature; and in the character matured under its influence we have the enthusiasm of humanity now so much talked of, *plus* the enthusiasm of piety now thrown into the background!

8. And lastly we come to the prospect before man, first, according to Hindu Philosophy, and afterwards according to Christianity. The prospect according to Hindu Philosophy is *annihilation!* The soul, when freed from bondage by mortifications and penances, isolation and meditation, loses its being as a drop in the ocean, either in the one physical or in the one spiritual substance of the universe. The Greek philosopher did not always point to a better goal. Socrates, not to speak of the schools that preceded him, did at times speak of beatific abode with the gods in a better world as the crowning reward of virtuous life; but his disciple, Plato, oscillated between materialism and pantheism; and his followers, the Neo-Platonists held up the theory of an eternal substance of a spiritual nature engaged in the agreeable work of disgorging and gorging world after world in endless succession!

The Gospel has brought life and immortality to light. Christian salvation has results which are proximate and results which are ultimate—a present and a prospective efficacy. Under its auspices, if we are allowed the expression, a new life is begun here, and matured under varieties of conditions, each eminently fitted to retard its development; but it is not, it cannot be perfected on this side the grave. But its perfection will be realized, under circumstances more propitious, in a better and more durable world. Heavenly bliss is described in the Bible by images and symbols, which, though not gross and debasing as those in the Koran, are more or less material; and these have given birth to some grave misapprehensions in the Church and some foolish objections out of it. Christianity is represented as an incentive to the dominant selfishness of our nature, and the Christian is held up as one who serves God and practises virtue solely with a view to the glittering prize or crown placed before him. His own aggrandizement, if not in this world, at least in the world to come, is his paramount motive—his own deliverance from the troubles of this life, his own happiness, his own glorification. This objection is perhaps not groundless when advanced against the gross views of heaven entertained by ill-informed Christians, but it is ludicrously groundless when brought against the sublime views presented, though in a material garb, in the New Testament. The crown held up as the great reward of piety and virtue in the other world is a crown of righteousness, the crown which sets forth the immutable righteousness of God and the completed righteousness of the beatified man: *the perfection of his nature and the happiness proceeding necessarily from it*, not material comfort and pleasure. He looks away from himself in this life, and is happy in proportion as he serves God with a singleness of eye to His glory; his happiness in heaven will proceed from the same source—service rendered to God with all the powers of a perfected nature, and without the hindrances of this life. Unselfish love to God begun here and perfected in heaven—such is the source of the happiness Christians experience here, and of that they look forward to as their reward.

Men are consciously and unconsciously assimilated in character to the gods they worship. Augustine in his "Confessions"

sets forth the principle in these well-known words: "Terence introduces a profligate young man, justifying his lewdness by the example of Jove, while he beholds on the wall a picture of Jupiter and Danæ, and excites himself to lust as by divine intuition: 'Shall he, who shakes heaven with his thunder, do these things, and may not I, a poor mortal, do the same?'" The vices current in the country are in nine instances out of ten *fac similes* of the vices of the gods and goddesses adored by our countrymen. The worshippers of Krishna become as a rule licentious; of Mahadeva, smokers of intoxicating drugs; of Kali, bloodthirsty Thugs. From this law of assimilation the philosopher is not excluded. The object of his worship, or rather contemplation, is a Being without power, quality, and relation, a magnificent Nothing; and it is no wonder that he should by a painful process of mortification endeavor to reduce himself to nothing by extinguishing his consciousness, thought, feeling, and muscular energy. That he does not succeed is no fault of his. He wishes and strives to be like his god, and his present aim as well as his future prospect is annihilation. The Christian also tries to be like the object of his worship—the Lord Jesus Christ—and he daily grows in piety, humility, meekness, and benevolence; and the prospect before him is perfection in these and other kindred virtues. Is it necessary to say that while Hindu Philosophy is Pessimism, Christian philosophy is Optimism in the highest sense of the term?

A word ought to be said under this head about what Christian salvation has in reserve for the body. No mercy was shown, no quarter given the human body in the schools, generally speaking, of ancient philosophy, in our own or in foreign countries. It was described as the seat of corruption and impurity, and its purification was placed beyond the confines of possibility. Matter and sin could not, according to approved philosophical maxims, be dissociated from each other any more than breath and physical life; and the only way in which the soul can be saved from sin is by its complete deliverance from material claims. So irreclaimably impure is matter, that God was thrown out of direct relation to it that He might not be contaminated by its inherent and inalienable corruption. The Hindus made

an emergent Deity the *nexus* between God and creation, and the Neo-Platonists held the doctrine of the transcendence of God at the expense of His immanence, making a primal potency, the idea of ideas, the intermediate link of connection. The mystics of the Middle Ages adopted the notion, and in our time Swedenborg recognized in Christ the *nexus* between God and the universe. Christianity, however, sets forth the original purity if not the absolute impeccability of the body, and offers it a share in its salvation. The body is involved in the consequences of sin, and has become the abode of deformity, disease, and death; but its deliverance from these fatal results and its ultimate glorification are insured. The whole man sins, the whole man is involved in the dire consequences of sin, the whole man is delivered from these, and the whole man is glorified—such is the glorious fruit of the scheme of salvation revealed in the Gospel.

In conclusion let us ask, Is an amalgamation between Hindu and Christian philosophy possible? The question is almost as absurd as the other, Is an amalgamation between darkness and light possible? A God without power, quality, and relation amalgamated with a God with power, quality, and relation! A man with a perfectly quiescent soul, thoughtless, passionless, involuntary, with a man with a soul endowed with thought, emotion, and volition! The idea of enthralment occasioned by sin, with the idea of enthralment occasioned by failure to recognize the essential distinction between soul and non-soul! The idea of gratuitous salvation, with the idea of salvation wrought by a painful process of penance and meditation! Life in an utterably more glorious stage of existence, with the frightful void of absolute annihilation! The reconciliation is impossible, and the less people talk of it the better!

The history of the Church is full of warnings against any attempt on our part to allow our doctrine to be in the slightest degree influenced and modified by human philosophy. The experiment was unhappily tried in the Church not long after the days of the apostles, and the result is known. Justin Martyr in the Sub-Apostolic and Tertullian and Origen in the Post-Apostolic times incorporated a little of their philosophy with the pure theology of the New Testament, and ages elapsed

before the Church was emancipated from the influence of the heterogeneous mixture. Asceticism crept into the Church and tinctured its theology and practical morality; and it was not till science had discovered the correct principles of hygiene, sanitation, political economy, and social science that its fetters began to be broken and shaken off. Perhaps they have not been entirely cast off yet; but the day is not far off when the influence of an asceticism imported from schools of false philosophy and self-righteous Pharisaism will not be felt, at least to an appreciable degree. Science has in various ways benefited the Church. It has disenthralled it from many wrong notions and erroneous interpretations of revealed truth, and it is destined to be a potent antidote to those gloomy ideas or morality which have placed Christianity in antagonism to the spirit of broad and comprehensive progress it has fostered. False science and false Christianity are antagonistic to each other, the object of the one being the adornment of our temporal life to the exclusion of that to which it is a stepping-stone, and that of the other being the maintenance of the interests of the soul at the expense of those of the body.

A MOT OF TALLEYRAND.—"Gentlemen," said he, after listening to an exposition of their creed by the theophilanthropists, "when Jesus Christ established a new religion, He found it necessary to be crucified, dead and buried, and to rise again the third day from the dead: go and do likewise, and your religion will be worth discussing." This well-known story has been repeated by Rt. Hon. Mr. Justice Stephen as putting in a few words the important truth that any religion having the power of uniting and governing men must be founded on a supernatural basis to be believed to be true.

THE CONCESSIONS OF DISTINGUISHED UNBELIEVERS TO THE BOOK AND THE MAN.

[A Lecture delivered before the Summer School of Christian Philosophy, Richfield Springs, N. Y., August 21st, 1884.]

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NO law of human nature is more unerring than this: that friends will testify just as favorably, and enemies just as unfavorably, as they can conscientiously. And there is often more truth in what our enemies say of us than in the testimony of our friends. The judgment of an honest enemy is more trustworthy than that of a flattering, deceitful friend. If there are faults, defects, weaknesses, an enemy will not overlook them; if there be virtues and excellences, friends will remind us of these rather than of our faults. If friends testify unfavorably, or if enemies testify favorably, such testimony is as trustworthy and indubitable as human nature is capable of giving. The favorable testimony of friends, if they be honest, is generally sufficient to establish the good character of any person or thing; but when friends and foes both agree in their testimony, whether it be favorable or unfavorable, such testimony cannot be doubted by any reasonable mind. Friends are expected to testify favorably, but enemies will do so only when honesty compels them. Hence the importance of an enemy's testimony.

It is the purpose of this paper to take advantage of this unerring tendency in human testimony by presenting an argument in support of the divine character and authority of Christianity based upon the concessions in its favor of such as may be called the unbelieving world. By this term (unbelievers, or the unbelieving world) is meant to be designated not simply avowed sceptics and the outspoken opponents of Christianity, but also

those who might be called "unregenerate believers," that is, those who, though friendly to the Christian religion and believing in it historically, yet never professed saving faith in the Lord Jesus Christ and never claimed to be believing, regenerate Christians. This argument is perhaps the most powerful of all the collateral evidences of Christianity with a certain large and influential class of unbelievers. The friends of Christianity, the great body of believers, are expected to testify favorably of it, its Christ and its Bible; and hence their testimony, though justly entitled to the greatest weight, has yet little influence with this class of unbelievers. But not so the testimony of the unbelieving or unregenerate world of thinkers and writers. These, being biased, not in favor of, but rather against, Christianity, will testify favorably of it only so far as honesty compels. Discarding, therefore, all such favorable testimonies as come from professed believers, we shall confine ourselves to such as come from what in theological language we call the unbelieving world. And among these concessions will be found all that is necessary to establish by an easy process of reasoning the divine claims of Christianity. For if the unbelieving world will only concede of Christianity, that it is, taken all in all, the best institution for moral ends in the world, that it has always done, and is now doing, more towards the moral elevation of the race than any other institution that now exists, or has ever existed, that is all we desire of them; we can then prove its divine character as a necessary consequence. If they will only concede of Jesus Christ that He is the best and purest man that ever lived—the highest type of manhood of which we have any record—that is all we desire of them; we can then prove, in view of His faultless humanity and of His divine claims, that His divinity must follow as an inevitable conclusion. If they, again, will only admit as to the Bible that it is the best book in all the literature of the world in its moral influence upon mankind individually and collectively, that is all we desire of them; we can then prove, in view of its character and its claims, that its divine inspiration and authority must follow as a necessary result. And that such concessions have been made by the unbelieving world concerning Christianity, its Christ and Bible, and made

not by a few but by many, if not all, of the greatest thinkers and writers among unbelievers, the testimonies presented in this paper will abundantly suffice to show.

The faith of the masses is determined by the faith of the thinking few. Not all unregenerate thinkers and writers have testified favorably of Christianity; but it can be affirmed without fear of successful contradiction that no earnest thinking man has ever yet made a serious and faithful examination into the claims of Christianity, its Christ and Bible, who has not either admitted its divine claims or else made such concessions in favor of its exalted character as make it more unreasonable to deny those claims than to allow them. Max Müller, the great orientalist and scholar, after making a careful examination and comparison of the various religions of India, said that one needs only to make such examination and comparison to be able to appreciate fully the apostle's boast, "I am not ashamed of the Gospel of the Lord Jesus Christ." The Bible itself does not disdain such an argument as this which we are advancing. "For their rock is not as our Rock, even our enemies themselves being judges," is the language of inspiration, which thus invites us to prove the superiority of Christianity by the testimony of its enemies. We do not expect the unregenerate world to testify as to the divine power and spirituality of the Christian religion, but only as to its intrinsic moral excellence and comparative superiority; believers alone can testify as to the former. And so too as to Christ, we desire unbelievers to testify only as to His exalted and matchless humanity. It is most fitting that believers should testify as to His true divinity in the highest and most exalted sense. Our Lord asked the disciples, saying, "Who do *men*—the unregenerate world—say that I, the Son of Man, am?" The disciples reply, "Some say that Thou art John the Baptist, some Jeremias, some Elias, or one of the prophets"—they are in doubt; they can't tell who or exactly what; they all think that Thou art a remarkable man, an inspired man, something more than an ordinary man. Our Lord continues, "But who say *ye* that I am?—ye, Mine own disciples, who have seen Me and known Me and been taught by Me, ye who have followed the Son of Man through the regeneration, who do *ye* say that I am?" Peter, in

behalf of the disciples, replies, "Thou art the Christ, the Son of the living God," to which our Lord responds, "Blessed art thou, for flesh and blood hath not revealed this unto thee, but My Father which is in heaven." There is a more satisfying knowledge of the divinity of Christ that belongs to the regenerate, being a revelation of the Holy Ghost, than is possible to the unregenerate. This is the all-important testimony, that of regenerate believers, and so long as the great body of believers are clear and invincible in their testimony as to the divine character of our Lord Jesus Christ, the Gospel of salvation will continue to win its widening way to the hearts and consciences of men. But still not without its peculiar significance and importance is the testimony of the unregenerate world: "Who do *men* say that I, the Son of Man, am?" By admitting that He was a John the Baptist, or a Jeremias, or an Elias, or some other remarkable and inspired man, but yet denying that He was truly God, the unregenerate men of our Lord's time set an example to the unregenerate world of all time in which they have been faithfully followed. But such concessions furnish the ground for an unanswerable argument in favor of the divine claims of Christianity. For to admit that in intellect and in moral character Christ was worthy to be compared only with the greatest and best of inspired men, and yet to deny that He was what He plainly claimed to be, viz: the divine Son of God, is to be guilty of an inconsistency greater than to deny His incomparable humanity on the one hand, or to admit His divine claims on the other.

The discussion of the divine claims of Christianity resolves itself into the discussion of the character and claims of the Book and the Man. The Bible is a divine-human book, and Christ is a divine-human person. These alone of all things earthly unite the divine and the human, and upon their divine claims rest the whole character and authority of the Christian religion. Our argument, then, is this: Christianity claims to be a divine institution; the Bible claims to be a divinely-inspired book and to contain doctrines and precepts obligatory in their nature on the ground that they are supernaturally revealed from God; Jesus Christ claims to be the eternal, divine Son of God, equal with

the Father. That these claims exist cannot be denied. That the Bible claims that all its cardinal and distinguishing doctrines were supernaturally revealed from God and bases their obligatory nature upon the truth of this claim, is as certain as that the Bible now exists. That Jesus Christ claimed to be the divine and eternal Son of God and based His authority upon this claim is scarcely less certain than that He once existed; the evidence that establishes the fact that He once lived is the very same evidence that proves that He claimed to be divine. Now these claims are either true or false. If false, they are either designedly false or unintentionally so. If designedly false they are the basest of impostures and all moral character is wanting in those who make the claim; if unintentionally false there is a self-deception and unsoundness of mind that is utterly incompatible either with greatness of character or of intellect. For in proportion to the magnitude of the claim is the baseness of moral character, if the claim be designedly false, or the weakness of mind, if the false claim be due to self-deception. A book or a person cannot be of a very high moral and intellectual order that is either designedly or unintentionally false in its doctrines and claims. A man cannot be the greatest and best man that ever lived and be either a deceiver or self-deceived.

It is now in order to present some of these remarkable concessions not only of outspoken opponents of the Christian religion, but also of such men as, though believers in some sense, yet never professed saving faith in the Lord Jesus Christ. And if we shall find, as we shall, that the great writers and thinkers whom we quote all unite in pronouncing Christianity to be the best institution known among men, and the Bible the best book in the literature of the world, and Jesus Christ the best man that has ever appeared in the history of our race, it will then be in order for us to return to our argument and ask how it can be possible for that which is the best in the world, whether it be an institution, or a book, or a man, to be either wholly or even partially false. That which is false, whether designedly or undesignedly so, cannot possibly be the best this world affords. And yet such is the inconsistent and untenable position which vast multitudes of unregenerate thinking men have always attempted

to hold with reference to the divine claims and authority of the Christian religion. Hear what have been their opinions.*

I. As to the Bible. Benjamin Franklin, who in early life was an avowed sceptic, but in later life was less outspoken, the man of hard sense and rigid proverbs and worldly wisdom, once wrote to a young friend: "Young man, my advice to you is that you cultivate an acquaintance with and a firm belief in the Holy Scriptures," and then he adds in keeping with his practical worldly wisdom, "for this is your certain interest." Thomas Jefferson, of sceptical, if not positively infidel, sentiments, likewise wrote: "I have always said and always will say that the studious perusal of the sacred volume will make better citizens, better fathers and better husbands." Rousseau, the sceptic, the fascinating and brilliant writer, the puzzle of moralists, also wrote in his "Confessions": "Peruse the books of philosophers with all their pomp of diction. How meagre, how contemptible are they when compared with the Scriptures. The majesty of the Scriptures strikes me with admiration." Daniel Webster, in many respects the greatest of American statesmen, gave utterance in one of his speeches to the following lofty sentiment: "If we abide by the principles taught in the Bible, our country will go on prospering and to prosper; but if we and our posterity neglect its instructions and authority, no man can tell how sudden a catastrophe may overwhelm us, and bury all our glory in profound obscurity." Again he said: "The Bible is the book of all others for lawyers as well as divines, and I pity the man who cannot find in it a rich supply of thought and rule for conduct." De Tocqueville, the distinguished French statesman, has said: "Bible Christianity is the companion of liberty in all its conflicts, the cradle of its infancy and the divine source of its claims."

Napoleon Bonaparte, one of the shrewdest observers of men and things that the world has ever seen, a man of great penetration of mind as well as of matchless personal valor, wrote thus

* The testimonies presented here are often abbreviated, but always, we believe, accurate. The writer has found the following works very helpful in the collection of these testimonies: "The Person of Christ," by Dr. Schaff, and "What Noted Men Think of Christ and the Bible," by Professor Townsend.

in his exile: "The Bible contains a complete series of facts and of historical men to explain time and eternity such as no other religion has to offer. If it is not the true religion, one is very excusable in being deceived; for everything in it is grand and worthy of God. The more I consider the Gospel, the more I am assured that there is nothing there which is not beyond the march of events and above the human mind. Even the impious themselves have never dared to deny the sublimity of the Gospel, which inspires them with a sort of compulsory veneration. What happiness that Book procures for those who believe it!" Diderot, the French philosopher and infidel, once said by way of confession: "No better lessons can I teach my child than those of the Bible." Goethe, whose original and brilliant genius is as dangerous as it is fascinating, is said to have been an extravagant admirer of the intellectual and æsthetic excellences of the Bible. He wrote: "It is a belief in the Bible, the fruits of deep meditation, which has served me as the guide of my moral and literary life. No criticism will be able to perplex the confidence which we have entertained of a writing whose contents have stirred up and given life to our vital energy by its own. The farther the ages advance in civilization, the more will the Bible be used." Says Matthew Arnold, the modern apostle of culture, "To the Bible men will return because they cannot do without it." Professor Huxley, the materialist and evolutionist, whose opinions are justly entitled to respect as one of the leading scientists of the age, with no predilections in favor of Christianity but all rather against it, has yet said: "I have always been strongly in favor of secular education in the sense of education without theology; but I must confess that I have been no less seriously perplexed to know by what practical measures the religious feeling, which is the essential basis of conduct, is to be kept up in the present utterly chaotic state of opinion on these matters, without the use of the Bible."

David Hume, the most noted of all modern sceptical philosophers, denounced the Bible uncompromisingly through life; but Dr. Johnson tells us that Hume confessed to a clergyman once that 'he had never even read the New Testament with attention." Edward Gibbon, the brilliant historian, is said always to have

spoken in terms of unqualified contempt for the sacred volume. Now it was the boast of this brilliant historian that he never allowed himself to pass judgment upon any book without giving it a thorough and careful examination; and yet he confessed in later life that, contrary to his almost invariable habit, he had made up his mind with respect to the truthfulness of the Bible and had discarded it, after reading "only the Gospel of John and one chapter of the Gospel of Luke." Thomas Paine, in like manner, never spoke of the Bible except to condemn its teachings and abuse its authors. But he once confessed, while criticizing it, that he kept no Bible near him. "I know not," said he, "how the printers have pointed this passage, for I keep no Bible." John, Earl of Rochester, was in early life an avowed infidel, but in later life he became a sincere Christian believer. When asked how he accounted for his former scepticism and hatred for the Bible, he replied, as he reverently placed his hand upon the Sacred Volume, "A bad heart, a bad heart, is the great objection against this Holy Book."[1]

II. Let us now present some of the most remarkable of these concessions with reference to the character of Jesus Christ.

Lucian and Porphyry, the earliest and bitterest opponents of Christianity, acknowledge the greatness and piety of Jesus. Julian the Apostate confessed that Jesus "rebuked the winds and walked on the sea and cast out demons," and in dying he exclaimed, "O Galilean, Thou hast conquered!" Celsus, a heathen philosopher of Greece who lived in the second century, wrote a book expressly against the Christian religion in which he pronounces Christ to be an impostor; but by the mention which he makes of the Gospels and of the leading facts in our Lord's life he furnishes the strongest possible argument against the mythical and legendary hypothesis by which it has been attempted to overthrow the credibility of the New Testament history. Spinoza, the great pantheistic philosopher, of Jewish extraction, wrote: "Christ was the temple of God, because in Him, God has most fully revealed Himself." Thomas Chubb, a noted English deist, wrote: "In Christ we have an example of a quiet and peaceable spirit; of a becoming modesty and sobriety; just, honest, upright, sincere; and, above all, of a most gracious and

benevolent temper and behavior; one Who did no wrong nor injury to any man; in Whose mouth was no guile; Who went about doing good, not only by His ministry, but also in curing all manner of diseases among the people. His life was a beautiful picture of human nature in its native purity and simplicity, and showed at once what excellent creatures men would be when under the influence and power of that Gospel which He preached unto them." Denis Diderot, the French philosopher, although a confirmed atheist, made the Bible, as we have seen, a part of the education of his only daughter. This philosopher was once present at a brilliant evening party when the conversation turned freely upon the supposed absurdities, stupidities and inconsistencies of the Bible. After taking a leading part in the criticism and condemnation of the Sacred Volume, he yet said: "Notwithstanding all the bad which we have said, and no doubt with good reason, concerning this devil of a book *(de ce diable de livre)*, I defy you all, as many as are here, to prepare a tale so simple, and at the same time so sublime and so touching, as the tale of the passion and death of Jesus Christ, which produces the same effect, which makes a sensation as strong and as generally felt, and whose influence will be the same after so many centuries."

Rousseau, alluding to Christ, says: "Can it be possible that the sacred Personage whose history the Scriptures contain should be Himself a mere man? Where is the man, where the philosopher, who could so live and so die, without weakness and without ostentation? When Plato describes his imaginary righteous man, loaded with all the punishments of guilt, yet meriting the highest rewards of virtue, he describes exactly the character of Jesus Christ. What an infinite disproportion there is between the son of Sophroniscus and the Son of Mary. Socrates dies with honor, surrounded by his disciples, listening to the most tender words—the easiest death that one could wish to die. Jesus dies in pain, dishonor, mockery, the object of universal cursing—the most horrible death that one could fear. At the receipt of the cup of poison, Socrates blesses him who could not give it to him without tears; Jesus, while suffering the sharpest pains, prays for His most bitter enemies. If Socrates lived and

died like a philosopher, Jesus lived and died like a God." "Napoleon Bonaparte," says Dr. Schaff, "reasoning from the overpowering authority and dignity of Christ as a teacher, from the amazing result of His peaceful mission and the imperishable nature of His kingdom as contrasted with the vanity of all human conquests and secular empires, justly inferred that Christ was more than man, that He was truly divine, and that His divinity is the key which unlocks the mysteries of Christianity." "I know men," said Napoleon, "and I tell you that Jesus Christ is not a man. Superficial minds see a resemblance between Christ and the founders of empires, and the gods of other religions. That resemblance does not exist. There is between Christianity and other religions the distance of infinity. Alexander, Cæsar, Charlemagne and myself all founded empires. But on what did we rest the creations of our genius? Upon sheer force. Jesus Christ alone founded His empire upon love; and, at this hour, millions of men will die for Him. In every other existence but that of Christ how many imperfections. From the first day to the last He is the same, always the same; majestic and simple; infinitely firm and infinitely gentle. He proposes to our faith a series of mysteries, and commands with authority that we should believe them, giving no other reason than those tremendous words, 'I am God.' What audacity, what sacrilege, what blasphemy, in that declaration, if it were not true!"

Pecaut, a noted French author, although he denied the divinity of Christ and even the sinless perfection of His humanity, has yet conceded that "Christ's moral character rose beyond comparison above that of any other great man of antiquity. No one was ever so gentle, so humble, so kind as He. In His spirit He lives in the house of His heavenly Father. His moral life is wholly penetrated by God. He was the master of all because He was really their brother." The poet Goethe, though too much a man of the world to give himself any serious concern about religion, seems yet to have been theoretically convinced of Christ's divinity. He has said: "I consider the Gospels to be thoroughly genuine; for in them there is the effective reflection of a sublimity which emanated from the person of Christ. . . . If ever the divine appeared on earth, it was in the person of

Jesus Christ." The philosopher Fichte, of sceptical views, wrote of Christ that "He did more than all other philosophers in bringing heavenly morality into the hearts and homes of common men. Till the end of time, all the sensible will bow low before this Jesus of Nazareth, and all will humbly acknowledge the exceeding glory of this great phenomenon." The poet Richter, though an opponent of evangelical Christianity, yet calls Jesus "the purest of the mighty, the mightiest of the pure, who, with His pierced hands, raised empires from their foundations, turned the stream of history from its old channels, and still continues to rule and guide the nations." David Friedrich Strauss, the most destructive of modern Bible critics and a most pronounced rationalist, has said of the Jesus of the Gospels that "He represents within the religious sphere the highest point, beyond which posterity cannot go; yea, whom it cannot even equal, inasmuch as every one who hereafter should climb the same height, could only do it with the help of Jesus, who first attained it. Among the improvers of ideal humanity, Jesus stands in the very first class. He remains the highest model of religion within the reach of our thought; and no perfect piety is possible without His presence in the heart. If we ask how Jesus attained that harmony of the soul, we find in the existing records of His life no trace of painful conflicts from which it might have proceeded. He appears a beautiful nature from the very start, which had only to unfold itself from within, to become more and more clearly conscious of itself, and more firm in itself, but had no need of returning and beginning another life."

"Dr. Baur, the master of the Tübingen school, and the ablest of the sceptical critics," says Dr. Schaff, "after the earnest investigation of a long and intensely studious life, came to the conclusion at last that the person of Christ remains a great mystery in history; and that, at all events, the whole world-historical significance of Christianity hangs on His person. Shortly before his death he made the remarkable concession that the conversion of St. Paul remained at all times an enigma to him which could not be satisfactorily solved by any psychological or dialectical analysis. We honor the honesty of this greatest of modern sceptics, and cherish the hope that he was

saved at last from the eternal night of despair which is the legitimate end of scepticism. One of his last words, I am told, was the sigh, 'Lord, grant unto me a peaceful end.'" And Paulus, the powerful rationalistic critic of the Gospels, concedes that Christ was a pre-eminently wise, noble and virtuous rabbi.

The dissolute, gifted Byron said: "If ever man was God, or God man, Jesus Christ was both." Mr. Gregg, a writer of the anti-evangelical school, though denying Christ's divinity, yet says of Him, "In reading His sayings, we feel that we are holding converse with the wisest, purest, noblest Being that ever clothed thought in the poor language of humanity. In studying His life we feel that we are following the footsteps of the highest ideal yet presented to us upon earth." Thomas Carlyle, the voluminous author and vigorous thinker, of semi-sceptical, semi-Christian sentiment, calls Jesus of Nazareth "our divinest symbol. Higher has the human thought not yet reached. A symbol of quite perennial, infinite character; whose significance will ever demand to be anew inquired into, and anew made manifest." Benjamin Franklin, in a letter to President Stiles of Yale College, said, "I think Christ's system of morals and religion, as He left them to us, the best the world ever saw or is likely to see. Still I have some doubts as to His divinity, though it is a question I do not dogmatize upon, for I have never studied it. I shall know about it soon." Said James A. Froude, "The most perfect being who has ever trod the soil of this planet was called the Man of Sorrows." Said Thomas Decker, "The best of men that ever wore earth about Him was a sufferer—that meek, patient, humble, tranquil spirit, Jesus of Nazareth." These words are found in the will of Charles Dickens, ranked among unbelievers: "I commit my soul to the mercy of God, through our Lord and Saviour Jesus Christ, and I exhort my dear children humbly to try to guide themselves by the teachings of the New Testament." And these words in the will of the matchless bard who sleeps at Stratford-upon-the-Avon: "I commend my soul into the hands of God, my Creator, hoping and assuredly believing, through the only merits of Jesus Christ, my Saviour, to be made partaker of life everlasting." Says Mr. Lecky, author of many noted and able works, "It was

reserved for Christianity to present to the world an ideal character which, through all the changes of eighteen centuries, has filled the hearts of men with an impassioned love and has shown itself capable of acting on all ages, nations, temperaments, conditions; and has been not only the highest pattern of virtue, but the highest incentive to its practice." Said Daniel Webster in a letter to a clergyman, "I believe Jesus Christ to be the Son of God. The miracles which He wrought establish in my mind His personal authority and render it proper for me to believe whatever He asserts." Matthew Arnold writes: "The true God is and must be pre-eminently the God of the Bible, the Eternal who makes for righteousness, from whom Jesus came forth, and whose Spirit governs the course of humanity."

Theodore Parker, an opponent of evangelical religion, and very pronounced against many of the vital truths of Christianity, has yet conceded that Christ "unites in Himself the sublimest precepts and divinest practices, thus more than realizing the dream of prophets and sages; rises free from all prejudice of His age, nation, or sect; gives free range to the Spirit of God in His breast; puts away the doctors of the law, subtle, learned, irrefragable, and pours out a doctrine beautiful as the light, sublime as heaven and true as God. The philosophers, the poets, the prophets, the rabbis—He rises above them all. Yet Nazareth was no Athens, where philosophy breathed in the circumambient air; it had neither Porch nor Lyceum, not even a school of the prophets. There is God in the heart of this youth. That mightiest heart that ever beat, stirred by the Spirit of God, how it wrought in his bosom!" Frances Cobbe, a follower of Theodore Parker, denied Christ's true divinity, but yet wrote of Him, "The originator of the Christian movement must have been the greatest soul of His time, as of all time. If He did not speak those words of wisdom, who could have recorded them for Him? 'It would take a Jesus to forge a Jesus' (Parker). The view which seems to be the sole fitting one for our estimate of the character of Christ, is that which regards Him as the great REGENERATOR of humanity. His coming was to the life of humanity what regeneration is to the life of the individual. This is not a conclusion doubtfully deduced from questionable

biographies, but a broad, plain inference from the universal history of our race. We may dispute all details; but the grand result is beyond criticism. The world *has* changed and that change is historically traceable to Christ. Christ, the elder brother of the human family, was the helper and, in the highest *philosophic* sense, the Saviour of humanity."

John Stuart Mill said of himself that he never had any religious belief; hence he is a most impartial witness. After trying to unsettle all the arguments for the existence of God and the immortality of the soul, he yet writes of Christ: "The tradition of followers may have inserted all the miracles which He is reputed to have wrought. But who among His disciples or among their proselytes was capable of inventing the sayings ascribed to Jesus, or imagining the life and character revealed in the Gospels? Certainly not the fishermen of Galilee; as certainly not Saint Paul, whose character and idiosyncrasies were of a totally different sort; and still less the early Christian writers. About the life and sayings of Jesus there is a stamp of personal originality combined with profundity of insight, which, if we abandon the idle expectation of finding scientific precision where something very different was aimed at, must place the prophet of Nazareth, even in the estimation of those who have no belief in His inspiration, in the very first rank of the men of sublime genius of whom our species can boast. When this pre-eminent genius is combined with the qualities of probably the greatest moral reformer and martyr to that mission who ever existed upon earth, religion cannot be said to have made a bad choice in pitching on this man as the ideal representative and guide of humanity; nor, even now, would it be easy, even for an unbeliever, to find a better translation of the rule of virtue from the abstract into the concrete, than to endeavor so to live that Christ would approve our life." Says Thomas Paine, the outspoken infidel: "The morality that Christ preached and practiced was of the most benevolent kind; and though similar systems of morality had been preached by Confucius and by some of the Greek philosophers many years before, and by many good men in all ages, it has not been exceeded by any." Thomas Jefferson wrote thus of Christ: "His system of morality was the most

benevolent and sublime probably that has ever been taught, and more perfect than those of any of the ancient philosophers." Ralph Waldo Emerson conceded "that Jesus is the most perfect of all men that have yet appeared," and gave as his reason for not including Christ in his "Representative Men" that "the character of Jesus requires a strong constitution to handle." Charles Sumner wrote thus to Rev. Jonathan F. Stearns: "I believe that Christ lived when and as the Gospel says; that He was more than man—namely, above all men who had as yet lived—and yet less than God. I pray you not to believe that I am insensible to the goodness and greatness of His character. My idea of human nature is exalted when I think that such a being lived and went as a man among men."

Ernest Renan, the brilliant and fascinating writer, now a sceptic, now an atheist, now a pantheist, but always eulogistic of the sublime Teacher of Nazareth, writes thus of Christ: "All history is incomprehensible without Him. He created the object and fixed the starting-point of the future faith of humanity. He is the incomparable man to whom the universal conscience has decreed the title of Son of God, and that with justice. In the first rank of this grand family of the true sons of God we must place Jesus. The highest consciousness of God which ever existed in the breast of humanity was that of Jesus. . . . Repose now in Thy glory, noble founder! Thy work is finished, Thy divinity is established. Thou shalt become the corner-stone of humanity so entirely that to tear Thy name from this world would be to rend it to its foundations. Between Thee and God there will no longer be any distinction. Complete conqueror of death, take possession of Thy Kingdom, whither shall follow Thee, by the royal road which Thou hast traced, ages of adoring worshippers. Whatever may be the surprises of the future, Jesus will never be surpassed. His worship will grow young without ceasing; His legend will call forth tears without end; His sufferings will melt the noblest hearts; and all ages will proclaim that among the sons of men there is none born greater than Jesus. Even Paul is not Jesus. How far removed are we all from Thee, dear Master. Where is Thy mildness, Thy poetry? Thou to whom a flower didst bring pleasure and ecstacy, dost Thou

recognize as Thy disciples these wranglers, these men furious over their prerogatives, and desiring that everything should be held of them? They are men; Thou wast a God."

But it would defeat the purpose of this paper to multiply these testimonies to weariness. These are presented only as specimens of the concessions of non-Christian men, of all shades of opinion and degrees of unbelief, concerning Christ and Christianity. The following will furnish a fitting close to these extended quotations. It is from John Von Müller, the great Swiss historian, who, after examining the writings of seventeen hundred and thirty-three authors, in seventeen thousand folio pages, gives the following as the result of his extensive investigations: "Christ is the key to the history of the world. Not only does all harmonize with the mission of Christ; all is subordinated to it. When I saw this, it was to me as wonderful and surprising as the light which Paul saw on his way to Damascus; the fulfilment of all hopes, the completion of philosophy, the key to all the apparent contradictions in the physical and moral world; here is life and immortality. I marvel not at miracles; a far greater miracle has been reserved for our times, the spectacle of the connection of all human events in the establishment and preservation of the doctrine of Christ."

It will be observed that we have here quoted not only from the pronounced opponents and enemies of the Christian religion, but also from others who, though friendly to Christianity and believers in some sense, yet never professed saving faith in Christ and are not generally regarded as believing, regenerate Christians. They were not believers in the scriptural sense of the term. They had the faith of assent, but not the faith of trust and obedience.

Now let it be borne in mind that all these favorable testimonies come, not from those who, as believing Christians, were biased in favor of Christianity, but come as concessions from unbelievers in the great free-thinking, unregenerate world. What an array of great names is here presented: Benjamin Franklin, Thomas Jefferson, Rousseau, Daniel Webster, De Tocqueville, Napoleon Bonaparte, Denis Diderot, Goethe, Matthew Arnold, Professor Huxley, Celsus, Lucian, Porphyry, Julian the Apostate,

Spinoza, Thomas Chubb, Pecaut, Fichte, Richter, David F. Strauss, F. C. Baur, Paulus, Byron, Gregg, Thomas Carlyle, James Anthony Froude, Thomas Decker, Charles Dickens, William Shakespeare, Lecky, Theodore Parker, Frances P. Cobbe, John Stuart Mill, Thomas Paine, Ralph Waldo Emerson, Charles Sumner, and Ernest Renan. Where can be found in the universal biography of the human race half a hundred brighter, weightier names among unbelievers than these? Where are those whose opinions are more entitled to respect than these? They are entirely free from all bias in favor of Christianity. And yet these all make concessions, which, if admitted and pressed to their logical and legitimate results, render it far more unreasonable to deny that Christ and the Bible are what they claim to be than to admit these claims. Here are learned authors, brilliant writers, earnest students, laborious scholars, eminent poets, able scientists, successful educators, accurate historians, popular novelists, matchless warriors, shrewd diplomatists, distinguished statesmen, unsparing critics, renowned orators, skilful lawyers, great philosophers, enthusiastic biographers, profound moralists — than whom a brighter galaxy of gifted names shines not in this world—all testifying, with remarkable unanimity, that the Bible is the best book in the literature of the world, and Jesus Christ the wisest, best, truest, noblest being that ever trod our planet. They deny that the Bible is a supernatural book and divinely inspired, but yet admit that it is the best book in the world: they deny that Christ is the God-man, a divine-human person, but maintain that He was the wisest and best man that ever lived.

Now it remains for us to show that this position of the unbelieving world with reference to the Holy Scriptures and the personal character of Jesus Christ is utterly untenable. It can be easily shown that the Bible must be either a misleading, untruthful and dangerous book, or just what it claims to be; and that Jesus Christ must be either false and untrue as a man, or just what He claims to be.

The Bible from first to last claims to contain a supernatural, divine revelation from God, and bases its whole authority and the obligatory nature of its doctrines and commands entirely upon

the ground that they come from God. Now that the Bible makes this claim is as certain as that it exists. And that which constitutes the substance-matter of the Bible, and gives character to it and differentiates it from all other books, is its supernaturally revealed doctrines and divinely enjoined precepts. Without these it would be an incongruous and meaningless fragment of worthless literature. The Bible then, if its divine claims be not true, is either a base imposture or a pious fraud; and its authors were either wilful and designing deceivers in claiming that they received what they taught by supernatural revelation from God, or they imagined that such was the case and hence were of an unsound mind. If the former supposition be true, the authors of the Bible were utterly without moral character, and invented a system of morals which, if true, consigned them themselves to eternal infamy on earth and eternal punishment after death. If the latter supposition be true, they were religious monomaniacs of utterly unsound mind, and their writings must bear marks of imbecility and incongruity. And not only that, but upon either hypothesis, there must be not simply one base and designing imposter to invent a pious fraud, or one self-deceived religionist of an unsound mind, but a long succession of base impostors or self-deceived and erratic religionists, extending from Moses to the Apostle Paul, through a period of over fifteen hundred years, each succeeding prophet and author being both able and willing to take up the deceptive work just where his predecessor left it. The authors of the Bible, then, constitute a long succession of either deceiving or self-deceived men, if the Bible be not what it claims to be. Let him believe this who can.

But can it be that the authors of the Bible were designing and wilful impostors? No; because not only the world of believers, but the unbelieving world all unite in pronouncing it the best book in the literature of the world; and it is utterly impossible that base men without moral character should be the authors of the best book in the world. Can it be then that the authors of the Bible were self-deceived, all fancying that they were receiving communications from heaven when they were not—that they were thus religious fanatics, of erratical and unsound mind?

No; because the Bible, as a literary production, has evoked the admiration of the greatest scholars and profoundest thinkers of our race, many of whom were outspoken sceptics and denied its claim to inspiration. Some of its most extravagant admirers have been unregenerate men. Learned critics and profound scholars have devoted years to its study, though studying it only to prove it false. But a book whose authors were imbeciles, or of an unsound mind, could not possibly continue to command the study, the respect and the admiration of scholars through all time. It seems equally impossible, therefore, to reflect either upon the moral character or the intellectual ability of the authors of the Bible. But if neither of these hypotheses be true, that is, if the authors of the Bible be simply honest and truthful men, possessed of sound minds, then the Bible must be what it claims to be, viz.: a divinely inspired book, containing doctrines supernaturally revealed from God. And far more consistent are they who maintain that the Bible is an erroneous, misleading and untruthful book, filled with lies to deceive men's souls, and hence unworthy of any respect, than this class of unbelievers with whom we are dealing who say that the Bible possesses the very highest moral and literary character, and yet deny that it is what its authors claim that it is—deny that it contains doctrines supernaturally revealed from God.

A similar conclusion must result if we apply the same argument to the character of Christ. The unbelieving world concedes that He is the best and wisest man that ever lived. But this best and wisest man claimed to be God. He used of Himself such language as this: "I and the Father are one;" "He that hath seen Me hath seen the Father;" "Before Abraham was I am;" "I am the Light of the world;" "I am the Way, the Truth and the Life." Now the person that made these claims must be either what he claimed to be, or an insane madman, or an impious blasphemer. There is no other possible alternative. If he was nothing more than a good and intelligent man, he was what he claimed to be; if he was a fanatical religionist and not possessed of a sound mind, he may have made these insane claims and still have been an honest man; if he knew these divine claims were false when he made them, he may still have been

a man of sound and strong intellect, but he was utterly without moral character. We must then choose between his divinity, his madness, and his impiousness.

The design and limits of this paper do not allow of our entering here into the discussion of the various theories advanced by Paulus, Strauss and Renan to escape the force of this argument. We assume here the authenticity and genuineness of the four Gospels and their trustworthiness as historical documents, to deny which would be to uproot the foundations of our faith in all history. But these three men, it will be remembered, are all among those who were quoted as speaking in most exalted terms of the moral and intellectual character of Christ. Multitudinous are the theories that have been advanced to account for the phenomenon of Christ's life by those who, admitting His historical existence, yet deny His true divinity. It is important to observe, moreover, that most of these theories are mutually contradictory of each other. Their respective authors discard and laugh at, each, the theory advanced by the others. But while each of these destructive critics pronounces untenable and absurd the positions taken by others, they yet all admit not only the historical existence of Christ, but that He was the wisest, the best, the most remarkable man that ever lived. Moreover, the theory which, while admitting His veritable existence, His pre-eminent wisdom and His pre-eminent goodness, yet pronounces unhistorical and untrustworthy the documents which record His words and works and ways, creates difficulties far more numerous and serious than it escapes. It only transfers the miraculous phenomenon of wisdom from Christ to His biographers, who were unlearned fishermen of Galilee; in which case the four evangelists become the four wisest men that ever lived. The sceptical Rousseau concedes this point in a remarkable paragraph: "Shall we suppose the evangelical history a mere fiction? Indeed, my friend, it bears no mark of fiction. On the contrary, the history of Socrates, which no one presumes to doubt, is not so well attested as that of Jesus Christ. Such a supposition, in fact, only shifts the difficulty without obviating it. It is more inconceivable that a number of persons should agree to write such a history, than that one should

furnish the subject of it. The Jewish authors were incapable of the diction, and strangers to the morality contained in the Gospel. The marks of its truth are so striking and inimitable, that *the inventor would be a more astonishing character than the hero.*" And do not these same critics tell us that "it takes a Newton to forge a Newton" and would take a Christ to forge a Christ—"that the character of Jesus, far from having been created by His biographers, or even embellished by them, appears to have been belittled by them"—that while His biographers might have invented His miracles, they could not have invented His matchless words and discourses of more than human wisdom? But these wonderful sayings of His, which they admit could not have been invented, are inseparably interwoven with His miracles and His divine claims.

Assuming, then, that which there has never been any reason for doubting, viz., the trustworthiness of the Gospels, let us ask which of the three possible alternatives concerning Christ must be our choice. Shall we say that he was what he claimed to be, or an insane madman, or a base impostor? Not an insane madman, if these testimonies of distinguished unbelievers are to be listened to; because they admit that He gave expression to the noblest sentiments, and is the author of the wisest sayings that have ever fallen from human lips. If this be madness, when was there ever so much method in human madness! And not a base impostor, because, according to these concessions, he is not only the wisest, but the *best* man that ever lived. Could a man who was possessed of such a mind as insanely to imagine that he was a God when he was only a mere man, be the profoundest thinker of our race and the author of sayings unequalled for genius, for wisdom, for beauty? Could a man who blasphemously claimed to be God when he knew he was not, be the best man that has ever appeared in the history of our race and his name be the synonym for moral grandeur of character? If Christ be not both of a good moral character and of a sound mind, that is, if he was either a deceiver or Himself deceived, He cannot possibly be the best and wisest man that ever lived. If either of these hypotheses be true, there have lived and are now living thousands of men far more perfect in character and in mind than He

was. Is it possible that a man could be the author of a system of morals which if true would consign himself to eternal infamy and perdition? Could a mythical personage, moreover, like the Christ of Strauss, or the hero of an unhistoric legend, like the Jesus of Renan, be the greatest of moral reformers and create the grandest era in the history of our race, and continue to rule and guide the nations? Which is the easier to believe, that Christ was what He claimed to be, the divine Son of God, or that Christianity, the grandest fact in all human history and the most powerful institution in the world to-day, should have sprung from an idle myth, or a pious fraud, or a conscious lie?

Such are the inconsistencies and contradictions with which the position of the anti-Christian world is, on every side, beset. To such desperate straits as these are they compelled to resort who reject the truth, and deny the divine claims of Christianity. They condemn the doctrines of Christianity as absurd and inconsistent with human reason, and laugh at what they call the credulity, stupidity and blindness of Christian faith. And yet such are the contradictions which they, who reject the doctrines of Christianity, believe instead of them. Let a man only honestly collect together and write down in a book all the speculations and dogmas which they, who reject Christianity, believe instead of it, and he will find that it takes more of what they call "blind faith" to believe such speculations, than it does to believe even the absurdities and fictions of Roman Catholicism in the dark ages, to say nothing of the reasonable doctrines of intelligent and orthodox Christianity in the nineteenth century. Such are the men who are trying with their carnal weapons to tear down and demolish the superstructure of Christianity and leave us only dust and rubbish instead. For, mind you, the critics of Christianity are *de*structive not *con*structive. They tear down, but the build us nothing instead. "The writers against religion," Edmund Burke has well observed, "whilst they oppose every system are wisely careful not to set up any of their own." And if they do erect systems of their own, it is not necessary for Christianity to refute them. They refute one another. The various schools of sceptics hold each others' systems of destruction, as well as of construction, in mutual contempt. And yet

men who believe in speculations and dogmas which others of their class mutually pronounce unreasonable and absurd, are they who pretend that they cannot believe in Christianity because its doctrines are unreasonable! Rejecting one Bible truth because it, not contradicts, but transcends human reason, do they not, we may ask, believe in its stead two speculations that transcend human credulity? There never lived a man who rejected Christianity because he could not believe its doctrines, but that he became thereafter, intellectually and spiritually, the victim of a creed, which for unreasonableness and credulity, was, compared with the Christian faith, as darkness to light and as the maze of error to the beauty and simplicity of the truth. "Some men," said the First Napoleon, "are capable of believing everything except the Bible."

It is, then, we may truthfully say, the verdict of universal mankind, of unbelievers as well as believers, of friends and enemies alike, that Christianity is the best institution in the world; the Bible the best book; Jesus Christ the best man. And can it be, we ask again, that that which is *best* in the world, whether it be an institution or a book or a man, is either wholly, or largely, or even partially false? Can it be that that institution which has done and is doing more good than all others and is destined ere long to subjugate the world unto Christ, is founded upon an idle myth, or a romantic legend, or moral insanity, or a conscious lie? Can it be that that book which has commanded the study, the admiration, the love, the reverence of the wisest and best in all ages, and has more intelligent readers to-day, perhaps, than all other books combined, is filled with idle visions or conscious lies to deceive men's souls? Can it be that the purest, noblest, truest, gentlest, grandest man that ever lived was either a self-deceived dupe or a designing impostor? If this be true, alas for the world! Then away with light and knowledge, and bring in darkness and ignorance to bless mankind. Put honesty in chains and give dishonesty the liberty of the world forever and the highest honor of the human race. Let truth then forever bid the world farewell and call in falsehood and fraud that they may command the love and homage of men, the praise of angels and the approval of God, when it shall come

to pass that the *best* this world affords is unreal or untrue. Is such a thing possible? To ask the question is to answer it.

But how is it to be accounted for that unbelievers and avowed sceptics should make such fatal concessions? It is, in part, because they do not realize in so doing what conclusions inevitably follow from their admissions; and partly, also, because they do not apprehend into what inconsistencies and contradictions they bring themselves by making such concessions and yet denying the divine claims of Christianity. The great Napoleon has answered the question by saying that there is an intrinsic sublimity about Christ and the Bible that compels, as it were involuntarily, admiration and veneration from even unbelieving minds and hearts. Another, and perhaps the best, reason is, because unregenerate thinking men apprehend very clearly how defenceless would be their position if they admitted Christ's true divinity, and hence His absolute divine authority, and yet declined to obey Him, which would necessitate the forsaking of their sins and the fulfilling of His commands. For all unregenerate men must choose between two inconsistencies, viz.: to admit Christ's faultless humanity but to deny His divinity, or to admit His divinity and yet decline to obey Him. The former is an inconsistency of mind, the latter of the heart and will. But the former position is quite as defenceless as the latter. The reason why unregenerate men acknowledge Christ's faultless humanity is because honesty compels them to do so. The reason why they deny His divinity is doubtless due very largely to their unwillingness to obey His self-denying moral commands.

How utterly untenable and devoid of all support in reason is the position in which the anti-Christian world is thus placed by these concessions! Says the sceptical man of science, "I do not believe in a divine revelation, and hence I must believe the Bible to be largely false; but I confess that there is no basis whatever for moral character without it." Says the sceptical apostle of culture, "I cannot believe in a supernatural revelation; the divine claims of the Bible must be false; but I admit that somehow or other we cannot do without it." Says the sceptical poet, "The Bible must be false in claiming to contain a supernatural revelation, but, though false, I have made it the

ideal guide of my moral and literary life." Says the sceptical philosopher, "I believe the Bible to be untrue, but, somehow or other, in all the literature of the world I can't find such lessons to teach my children." Says the sceptical statesman, "I do not believe in the divine claims of the Bible, and hence it must be so far false; but I am compelled to admit that its studious perusal is the best way to make good citizens, good husbands, and good fathers." Says the sceptical man of letters, "The Bible is full of incredible things which are repugnant to reason, and which it is impossible for a sensible man to admit or conceive; and yet I confess that such is the moral majesty of the Scriptures and such the moral purity of the Gospels that the writings of earth's best philosophers are mean and contemptible beside them." And of the God-man they exclaim, "We do not believe His divine claims, and, somehow or other, He must be false; but, somehow or other, He is the wisest, and best, and purest, and truest, and grandest man that ever lived and dwelt among men, pointing to God, and leading the way." Oh Jesus of Nazareth! amazing spectacle! the vast world of unregenerate men, though denying Thy divinity and robbing Thee of Thy true glory, have yet gathered together here to crown Thee King of men and Lord of all. And while Thy saints of all ages are joining in a song of sweet accord unto Thy gracious name, unbelievers, and sceptics, and infidels, and atheists beg that they too may do Thee honor and so, "setting the name of Jesus above every name," they join with us in one universal song and "crown Thee Lord of all."

Yes, there is something in the character of Christ and the Bible that *compels veneration* even from unwilling hearts and unbelieving minds; just as the devils of old acknowledged Christ's divinity in crying out against Him. How else explain it that these men are trying with one hand to tear down and demolish Christianity, and with the other to sing its praises? What an anomaly is the carnal mind! Into what inconsistencies and contradictions does it lead even the wisest of unregenerate men. With a destructive rationalistic criticism they would tear the revealed Word of God in pieces and prove it all false, and when they think they have accomplished their unholy task, they turn themselves

about and begin to sing its praises and call it the best book that was ever written. With their carnal weapons they would beat down the superstructure of our holy faith, and then holding inquest over its ruins, they pronounce it the truest and noblest faith that ever inspired men to high and holy aims and to deeds of unselfish love. They would rob the Son of Man of the divine glory that the Father gave Him, and then with their faint praises give Him instead an ignoble human glory. They would prize up and overturn the rock of our salvation, and when their mighty destructive task was done, they would carve upon its upturned surface in fitting phrase: "There is no rock like this Rock in all the universe of God!" Yea, in their carnal madness they would slay Jehovah himself with the word of their mouth, and then upon the very grave of God they would rear a monument to His honor and with the very hands that had slain Him would write an epitaph to His eternal praise. Verily, there is a sublimity about our God and Bible that inspires a sort of compulsory veneration even from unbelieving minds and hearts. Thus and thus only can we account for such favorable, though fatal, testimonies from unregenerate and doubting minds.

Missionaries tell us that there is in the island of Japan a Christian church that was erected in part out of stones that were hurled with deadly intent against the early Christians by their enemies. And so, ye enemies of our faith, ye have hurled your anathemas and directed your hostile arguments like deadly stones against us. But, far from accomplishing their destructive task, we have caught them up and therewith builded this unanswerable argument in the evidences of our Christian faith and reared this mighty pillar to support the earthly temple of God's eternal truth, in which temple ye must worship or be forever lost.

O Book, of all books the best, surely thou didst come from God, and thou shalt be our light and guide, as, through this sin-darkened world, we try to make our way to God and heaven. O Man, of all men the wisest and best, we follow Thee as our model, we accept Thee as our Saviour, we worship Thee as our God.

SUMMER SCHOOL AT RICHFIELD SPRINGS.

By Charles M. Davis, Secretary of the Institute.

The first Summer School of the American Institute of Christian Philosophy opened Tuesday, July 12th, 1881, at Warwick Woodlands, Greenwood Lake, with thirteen members. The sixth School was held at Richfield Springs, in August, 1884, the membership of the Institute being four hundred and thirty-four. Although this is an encouraging growth for three years, it is by no means what it should be. The officers see constant opportunities for doing important work in the field which is peculiarly the Institute's, and from which nothing but want of a proper support keeps them back.

The Summer School at Richfield Springs was opened Wednesday morning, August 21st, at 11 A.M., the devotional exercises being conducted by the President, Rev. Dr. Charles F. Deems. After which the regular paper of the day was read by Prof. Francis L. Patton, D.D., of Princeton Theological Seminary. His theme was "Doubt."

At the *conversazione* in the afternoon Prof. Patton discussed the subject with Dr. Herrick Johnson, Profs. Beecher, Tillett, Revs. G. R. Pike, D. M. Rankin, and others. Particular attention was given to the proper manner of dealing with young men who are giving up the faith of the nursery and are settling their religious beliefs for themselves.

Rev. Dr. Stuart Mitchell, of Bloomsburgh, Pa., conducted the devotional exercises on Thursday morning. Prof. Wilbur F. Tillett, of Vanderbilt University, Nashville, Tennessee, read a paper on "The Concessions of Distinguished Unbelievers to the Book and the Man." At the discussion in the afternoon Prof. Tillett stated that the testimonies quoted were the result of careful reading for four or five years. Many took part in the conversation—Profs. Beecher, Davis, Baralt, Drs. Mitchell, Johnson, Mr. Parsons, Mr. Lyon, and others.

On Friday, Scripture was read and prayer offered by Rev.

Granville R. Pike, of Elbridge, N. Y. The regular paper of the day was by Prof. Herrick Johnson, of North Western Seminary, Chicago, Ill., on "Philosophical Topics in the Pulpit." The lecturer held that there is a distinction between philosophy and philosophical topics. There is no reason for the presentation of the latter in the pulpit, while the former gives tone to its utterances. At the *conversazione*, Dr. Johnson being in the chair, the subject was discussed in an animated manner by many members of the Institute.

On Saturday, the fourth day of the School, Rev. Dr. Todd, of Ohio, led in the devotional exercises. Rt. Rev. Bishop Samuel S. Harris, of Detroit, Mich., addressed the School on "Capital and Labor." Calling attention to the fact that the "labor question" is not the same here as in Europe, he discussed the relative interests of capital and labor, the dangers from socialism, monopolies, and large corporations, and the remedies. At the afternoon *conversazione*, Rev. Messrs. Bennett, Ward, Rankin, Pike, Whitfield, Messrs. Lyon, Parsons, and others discussed some of the questions propounded in the morning.

On Sunday, the President, Rt. Rev. Bishop Harris, and Prof. Tillet preached from the pulpits of the churches in the town.

On Monday, Rev. Robert Granger, Rector of the Episcopal Church, Richfield Springs, conducted the opening devotional exercises. After which the President, Rev. Dr. Deems, delivered the Annual Address, his subject being, "The Field of To-day; a View of the Progress of Christian Thought and Christian Work During the Year." After the address brief speeches were made by the Secretary, Messrs. Lyon, Whitfield, Rankin, Professors Tillett, Beecher, and others. The afternoon session was omitted, and the officers and lecturers took a half-holiday and visited Otsego Lake and Cooperstown.

The devotional exercises on Tuesday, the sixth day of the School, were led by Rev. Prof. Beecher, of Auburn Theological Seminary. The paper of the day was by Rev. Dr. Wm. H. Platt, of Rochester, on the "Correlation of Physical and Spiritual Forces." The lecture was illustrated by a chart to show the comparative and decreasing influences of mythology, Judaism, and ancestral worship on mankind until the time of Cæsar; the

increasing influences of civil power and of philosophy; and the final absorption of all by the Christian religion. In the afternoon, Mr. S. H. Wilder, of New York, Rev. Mr. Egbert, of Buffalo, Profs. Beecher and Davis, Rev. Alex. Mackay-Smith, of New York, and many others took part in the discussion.

On Wednesday, Scripture was read and prayer offered by Rev. Orlando C. Coles, Pastor M. E. Church, Richfield Springs. The paper of the day was by Prof. Noah K. Davis, of the University of Virginia, on the question, "Is Prayer Reasonable?" This called forth earnest discussion in the afternoon from Messrs. Wilder, Lyon, Granger, Beecher, Platt, Pike, and others.

On the eighth and last day of the School, the devotional exercises were conducted by Rev. D. M. Rankin, Pastor of the Presbyterian Church in Richfield Springs. The paper of the day was by Willis K. Beecher, D.D., Professor in Auburn Theological Seminary. His subject was, "Historical *versus* Critical Evidence." In the afternoon the earnest discussion showed how deeply the lecture had interested those who had heard it. A brief period was then spent by members in expressing their sense of the valuable work done by the Institute during the year; of the influence of the Summer Schools, especially when the lectures shall be circulated through CHRISTIAN THOUGHT; and the resolution of those who had attended the sessions to further the work as they might be able. The following letter from Rt. Rev. Bishop Samuel S. Harris, of Detroit, was read and heartily approved as expressing the feeling of the members present:

RICHFIELD SPRINGS, August 25th, 1884.

MY DEAR SIR:

I cannot leave Richfield Springs without expressing the great gratification and interest with which I have attended the sessions of the Institute of Christian Philosophy, and my sincere regret that I cannot be present at the Annual Meeting and at the sessions that are to follow. It seems evident to me that the best hopes of the founders and promoters of the Institute are being realized, and that a still larger measure of usefulness will be filled by it in the near future. For myself I beg to say that I will esteem it both a duty and a privilege to do all in my power to further the good and beneficent work which it has undertaken.

With grateful acknowledgments to you and all the officers for your thoughtful courtesies, I am

Very sincerely yours,

SAMUEL S. HARRIS.

REV. DR. DEEMS, President, etc.

The School was closed for the season with prayer by the President.

MEMORABILIA.

BUNSEN.—The late Baroness Bunsen, remarkable for her quickness of discrimination in many departments, wrote thus on the 14th December, 1863: "How I thank you for telling me of the *funzioni* of the Church of Rome against Renan. Their consciousness is, that he is their own, as having been educated by Jesuits, from whom he ran away! How they would like to light up an *auto da fe* for him! My own feeling is that of satisfaction that the book has been written. This is no longer Voltaire mocking and doubting: the grandeur and perfection of the Saviour's character is *hailed and worshipped* and held up as a *reality*, and an adorable reality, to the unbelieving world; and I believe I know too well the state of minds, among young men in every country, not to have reason to anticipate good to them from reading Renan's *poetry*. Only think what people have been reading and *admiring*, of late years—that horrid system of Buckle! and now they are delighted to have a man of science, very respectable in himself, deriving us all from the chimpanzee. Those are the tendencies, to me abhorrent, only I trust nobody will *preach* against them. What is *bad* in Renan, is so absurd and involves such contradictions, that I think it must defeat itself."

CALDERWOOD.—Professor Calderwood, in a late speech in Glasgow, said that "the spirit of unbelief is becoming weaker and materialism is not now what it was twenty years ago. It was not to be seen among the masses of the people, and those who used to encourage scepticism are much more cautious now."

PRINCIPAL DAWSON has the following views of the natural force of prayer: "A naturalist," says he, "should be the last man in the world to object to the efficacy of prayer, since prayer is itself one of the most potent of natural forces. The cry of the young raven brings its food from afar without any exertion on its part, for that cry has power to move the emotions and the muscles of the parent bird, and to overcome her own selfish appetite. The bleat of the lamb not only brings its dam to its side, but causes the secretion of milk in her udder. The cry of distress nerves men to all exertions, and to brave all dangers, and to struggle against all or any of the laws of nature that may be causing suffering or death. Nor in the case of prayer are the objects obtained at all mechanically commensurate with the activities set in motion. We have all seen how the prayer of a few captives, wrongfully held in durance by some barbarous potentate, may move mighty nations and cause them to pour out millions of their treasure to send men and materials of war over land and sea, to sacrifice hundreds of lives, in order that a just and proper prayer may be answered. In such a case we see how the higher law overrides the lower, and may cause even frightful suffering and loss of life, in order that a moral or spiritual end may be gained. Are we to suppose, then, that the only being in the universe who cannot answer prayer is that One who alone has all the power at His command? The weak theology which professes to believe that prayer has merely a subjective benefit is infinitely less scientific than the action of a child who confidently appeals to a Father in heaven."

VOLTAIRE tried to be an atheist, but could not. He said: "Le monde m'embarrasse et je ne puis songer que cet horologe existe et n' a pas d'horologer." This world troubled him: he could not imagine how such a clock could exist and there be no clockmaker.

ABOUT BOOKS.

[In this department we shall make mention of recent publications, especially those in the line of our studies. There will not be space for extended review. The name of the book, its publisher, and its price when known, together with a brief statement of its drift will probably meet the demands of our readers.]

The old beliefs in Japan are losing their power over the educated. It is an important question what shall take their place. Works of unbelief from England and America are sent forth to that country now arousing itself to intellectual activity, and it is said that those books which antagonize the Christian religion are received and read with avidity. It is also said that a short time ago the people cried "No religion!" but that that has been replaced in some measure by the question, "What religion?" To answer that, a course of lectures was instituted, designed to appeal to the cultivated portion of the people. They were delivered in Tokio in both English and Japanese, on alternate Saturdays, from January 6th to April 14th, 1883. Four of the lectures were delivered by Mr. Charles S. Eby, one by Prof. J. A. Ewing, B. Sc., F.R.S.E., of the Science Department, Tokio University, and one by Prof. J. M. Dixon, M.A., of the Imperial College of Engineering, Tokio. The subjects are as follows: I. "Christianity and Civilization;" II. "The Scientific View: the Relations of the Christian Religion to Natural Science, especially to the Theory of Evolution;" III. "A Psychological View: What is Man?" IV. "The Historical View: Christianity and History;" V. "Christianity and Other Religions;" VI. "Christianity and Morality: the Practical Test." These lectures are carefully prepared and admirably written. As published they must exert a most wholesome influence, if widely circulated. The volume is well printed and bound. On the back it is called "TOKIO LECTURES, 1883." If another course has been delivered this year, we trust that the learned gentleman who so kindly sent this will continue his favors, which we will repay in kind. We do not know the price of the volume nor where it can be

obtained. The imprint on the title-page is—"Yokohama: B. Meiklejohn & Co., 12 Water Street. 1883."

Our learned co-worker, Mr. Ram Chandra Bose, is the author of a book of rare merit, "HINDU PHILOSOPHY POPULARLY EXPLAINED. THE ORTHODOX SYSTEMS." In it he has made more copious use of original sources of information than other writers whose works are accessible in the English tongue. Mr. Bose's nativity in India and long training in its native and English schools have given him insight into the spirit of Hinduism and an ability to state its characteristics rarely enjoyed. This volume will be useful to students of philosophy and generally acceptable to those who simply desire to know what persons of average intelligence should know about so important a subject. In his twelfth chapter, Mr. Bose has incorporated, by permission, the lecture he delivered before the Summer School at Key East, and which appears in this number of CHRISTIAN THOUGHT. Mr. Bose made many friends in this country who will be happy to hear of his increasing usefulness. His book is published by Funk & Wagnalls. Price $1.00.

We have read with pleasure and instruction a book on "India," by T. J. Gracey, D.D., seven years a missionary in India and member of the Oriental Society. It is a useful hand-book, answering most of the questions which arise about the country, the people, and the missions of India. We have placed it among our books of reference. Scranton, Wetmore & Co., Rochester, New York. Price, 50 cents.

Messrs. Funk & Wagnalls, for fifteen cents, send a copy of "NUMBER ONE, AND HOW TO TAKE CARE OF HIM," a 12mo. of 160 pp., by Joseph J. Pope, M.R.C.S., dealing with questions of food, dress, work and play in a more practical way than is common with such books. The information is valuable and the style attractive.

"THE GOSPEL IN ALL LANDS" is in its tenth volume. It has a weekly and a monthly edition, and is published by Rev. Eugene

R. Smith, 114 W. Baltimore Street, Baltimore, Md., at $2.00 a year. It is well illustrated. The industry displayed in collecting so much and so accurate information upon missions and subjects germane, has been to us a subject for admiration. The volumes already published form a library which will grow in value as the work of Christianity spreads.

"THE MAN WONDERFUL IN THE HOUSE BEAUTIFUL," is the title of a volume which teaches, in an allegory, the principles of physiology and hygiene, and the effects of stimulants and narcotics. It is prepared for home reading and is illustrated. Fowler & Wells, 753 Broadway, N. Y. Price $1.00.

IMPORTANT PAMPHLETS.

"THE ENDS WE AIM AT." An address to the Alumni Association of Vanderbilt University, by Rev. R. F. Chew.

"A FEW THOUGHTS ON NEW DEPARTURES IN RELIGIOUS DOCTRINE." An address by Willis J. Beecher, Professor in Auburn Theological Seminary. Remarkably acute and fair.

"THE IMMEDIATE CHRISTIANIZATION OF JAPAN": Prospects, Plans and Results." By C. S. Eby, Tokio, Japan.

"THE TEACHING OF THE TWELVE APOSTLES. The best edition of this work known to us is that published by Charles Scribner's Sons, at 50 cents in paper and 75 cents in cloth. It is edited with a translation, introduction and notes, by the competent Professors Hitchcock and Brown, of the Union Theological Seminary. The Greek text is on the page opposite the English version, a satisfactory arrangement. All our readers know that the MS. was found by Bishop Bryennios, who is now Metropolitan of Nicomedia, and that he published the long lost document at Constantinople, in 1883. Frequent letters on the subject have led us to mention this edition.

AM I FREE?

[A Lecture delivered before the American Institute of Christian Philosophy, at its Summer School at Key East, N. J., 16th July, 1884.]

By Noah K. Davis, LL.D.,

Professor in the University of Virginia.

THE question is very old; it is the problem of the ages, says Hume. Its solution has closely engaged the attention of the best thinkers the world has known, and upon it a vast literature has accumulated. Yet it is a question unanswered, a problem unsolved, and seemingly hopeless. An apology, then, is needed for even the humblest attempt to throw light upon it. The apology is found in its importance.

Who or what am I, if not free? I am not a person; I am merely a thing. If not free, I originate nothing, I am not the beginning of anything, nor indeed the end of anything; I am a mere channel. In that case, too, I am active only in the sense that a rolling stone, or a climbing vine, is active; strictly speaking, I am wholly passive, tossed about as the winds may blow. I am not the creator, but the creature of circumstances. My conceptions are all impressed upon me. My knowledge is given, not acquired, my emotions are tides, my impulses transmissions.

Kant names freedom of will as one of the three great ends of philosophy. Does it not, in an important sense, lie at the beginning of all philosophy? For unless I be free, there is no philosophy. A power to discriminate the true and false is not enough; there must also be power to choose and use the true rather than the false. Unless there be this power of intelligent choice, there can be no search after truth; for search implies freedom. Anything, then, beyond barren rudiments of knowledge is impossible, and all science, all philosophy is an idle dream.

Let us add, more specifically, that freedom is the postulate of ethics. Unless I be free, there is for me no right and wrong, no duty, no obligation, no responsibility, no morality or virtue, no sin or crime, no good or ill desert; conscience is a chimera, religion a delusion, and God a myth.

A question whose answer imports with it the answers to so many momentous questions touching all that is noble and most cherished in ourselves and our relations to others, is one that cannot be dismissed. It obtrudes upon every thoughtful mind; it will not down. If we would establish our claim to the dignity of personality, it must be answered. If we would have a thoroughgoing philosophy, or even one of the every-day sort, it must be answered. If we would have a complete theory of morals to guide our conduct, it must be answered. One may be pardoned then for asking, Am I free, and venturing to think about it. We hardly aspire to answer the question; but we hope to clear away some of the obscurity that has gathered around it, and thereby to render a settled answer more easily attainable. Let us think closely, move slowly and carefully where so many have lost the way, convinced that only a single step in the right direction will be of value, and well worth our pains.

I.

An objection to our procedure might, perhaps, be raised at the outset: Has it not just been said that all search after truth implies freedom? If this be so, then your proposed search concerning freedom must presuppose it, and therefore the attempt itself begs the question.

The answer is very simple. It is a significant fact that every man believes in the freedom of his own will under all circumstances, and consequently in that of all other men. This conviction is deep-seated, immovable and universal, and is the underlying basis of all human conduct, individual, social and political. The question concerning freedom is philosophical, the doubt is formal and speculative, not at all actual and practical, and arises only in the attempt to complete a philosophical system. When the question is raised, the universality of the fixed belief gives clear logical presumption in favor of the reality of

freedom. The burden of proof, then, lies in the first instance on the advocates of necessity, and until their proof is fairly made out the advocates of liberty are not chargeable with petition in assuming its reality, and proceeding upon this, as the condition of all investigation, to examine the logical grounds of the belief in its reality. Indeed, having a presumption so well founded, they may be content with a reply to the argument for necessity as sufficient to settle the question in favor of liberty.

The objection may, however, be retorted fairly upon the advocate of necessity. If the search after truth imply liberty, then you that deny liberty can support your denial only by virtue of the reality of this prior condition. You tacitly claim to be free in the attempt to disprove freedom. In denying it, you assume it. Your proffered argument, then, is an essential self-contradiction, absurd in the very undertaking, *ab initio* null, whatever be its content.

II.

Without insisting on the foregoing reduction, let us hear the argument for necessity stated simply, clearly, and as forcibly as possible:

(1.) Every change is caused;
A volition is a change;
∴ A volition is caused.

But like causes produce like effects; hence, whatever is caused is determined in kind and degree, or necessitated to be what it is, by its cause. Taking this as a major we have:

(2.) Whatever is caused is necessitated;
A volition is caused;
∴ A volition is necessitated.

The first major, Every change or event is caused, is an intuitive necessary truth, known as the axiom or law of causation. The second major is a direct inference from the intuitive necessary truth, Like causes produce like effects, known as the axiom or law of uniformity in nature. The minor in (2) is the conclusion of (1). There remains the minor in (1), A volition is a change. Who will question it? So then this process, being a simple and strictly logical deduction mainly from axiomatic

truths, claims to be a close demonstration that, a volition is necessitated, or that no act of will is free.*

III.

To the foregoing argument the advocates of liberty have made various replies.

Some blindly cut the knot, saying: Nevertheless I am free, for I am conscious of liberty.† If this be true it ought to settle the question and be an end of controversy. If freedom be a fact of consciousness, then it neither needs nor is capable of proof or disproof, but as original, ultimate and given in our very nature, it cannot be denied. It may be needful to show that it is a fact of consciousness; but this being done, freedom is thereby reduced to a certainty, and all disputes about it are mere empty words. Those who take this high ground, however, are usually not content to rest there, but descend from it and enter with zeal into the controversy, and thereby betray a lack of confidence in their claim.

And indeed the claim cannot be established; the statement is not true. I am conscious of a deep and ineradicable conviction that I am free, but this consciousness of a belief is easily

* Many necessitarians do not admit any truth to be intuitively necessary, but nevertheless they hold that the axioms named above are irrefragable.

† "Liberty is the consciousness of the ability to decide differently, to act differently. The human will in the consciousness of itself is exalted to the consciousness of liberty. We impute to ourselves in our consciousness liberty of willing. The impulses which operate on our wills present themselves to our consciousness not as coercive causes, but are rendered motives by the soul itself. Thus our willing and acting are to our consciousness free."—*Ulrici.*

"Every man is conscious of a power to determine in things which he conceives to depend upon his determination."—*Reid.*

"The free-agency of man cannot be speculatively proved, neither can it be speculatively disproved; but we may claim for it as a *fact* of actual reality though of inconceivable possibility, the testimony of consciousness." "Man is conscious of his liberty to act."—*Hamilton.*

"The almost overwhelming proof [of necessity] seems, however, more than balanced by a single argument on the other side; the immediate affirmation of consciousness in the moment of deliberate volition. It is impossible for me to think at such a moment, that my volition is completely determined by my formed character, and the motives acting upon it. The opposite conviction is so strong as to be absolutely unshaken by the evidence brought against it. . . . Let us scrutinize this consciousness of freedom."—*Sidgwick.*

distinguishable from a consciousness of its object. Moreover, I cannot be conscious of liberty, for liberty is a pure essential negative, the absence of constraint.* Now I cannot be conscious of the absence of a thing, but only am not conscious of its presence. This unconsciousness yields nothing.

IV.

Others cut the knot boldly with open eyes. Allowing the law of causation to be a positive dictum of intelligence, they find themselves compelled, in order to escape the consequences of this doctrine, to deny that the law, though universal in form, should be allowed as universally true. Admitting its application to all other mental modes, they would exempt the facts of volition. They pronounce volition to be a cause that is not an effect, an uncaused cause, a free cause, an absolute beginning, a power of absolute origination. This they grant is wholly incomprehensible. By a necessity of thought every origination is only an apparent, not a real, commencement; we cannot conceive an absolute beginning; we cannot therefore conceive a free volition. Nevertheless volition is free.†

* "The conception of liberty is properly negative, as the substance of the conception is nothing more than the denial of causal necessity. We think simply the absence of all that hinders and limits."—*Schopenhauer.*

† "Will is that kind of causality attributed to living agents, in so far as they are possessed of reason; and freedom is such a property of that causality as enables them to originate events independently of foreign causes determining it." . . . "We can think of but two kinds of causality with respect to that which happens—causality according to nature, causality derived from liberty. By liberty, I understand the ability to originate of ourselves. . . . Reason gives the idea of a spontaneity which can of itself begin to act, without needing the precedence of any other cause to determine it to action in accordance with the law of causal connection. On this transcendental idea of liberty is grounded the practical notion of it, and the transcendental creates in the practical that precise element of difficulty which has always surrounded the question whether liberty is possible."—*Kant.*

"A free will would then be one which is not determined by grounds, is consequently determined by nothing whatever, and whose individual acts originate in itself absolutely and in a completely original way. But all clear thinking is quenched by this conception, the conception of the *liberum arbitrium indifferentiæ*, and yet this is the only clearly defined, fixed, and decided conception of what is styled liberty of will. To maintain that to a particular man, in a particular set of circumstances, two conflicting modes of acting are possible is perfectly absurd."—*Schopenhauer* in *Grund-Probleme.*

Upon what ground they thus subordinate the law of causation to the doctrine of liberty does not appear. To derogate, in the interest of the latter, from the universality of the former seems indeed quite arbitrary, a somewhat violent instance of free cause. But to exempt the phenomena of volition from causality cannot be valid, for this represents mind itself as a complement of contradictions. Moreover, the law, as a necessary axiomatic truth, is essentially and strictly universal, and to affirm an exception to an axiom is to affirm not what is merely incomprehensible, but what is self-contradictory and absurd.

V.

Another proposed escape from the grip of the logic of necessity admits that mental states are caused, but insists that the law is modified in its application to mental phenomena, more particularly to volition. We are told that while causation operates both in the sphere of matter and of mind with certainty and unvarying uniformity, yet in its mode of exercise in the two spheres there is a wide difference. In this difference is discovered a modification of the law, and such a modification as provides for freedom.*

I would be glad to see a statement of the law in its modified form. I must confess I do not understand what may be meant by a modified axiom. One may be variously expressed, but in

* "It has been tacitly assumed that if the Will is free, in the sense of being superior to motives, it must be so by superiority to the law of Causality also, although such a view really violates the nature of the problem, and that to the extent of making it irrational. For whatever be the nature of the problem, it certainly does not stand thus: Is Volition an uncaused event? Are there facts in consciousness which cannot be attributed to any cause?"

"The theory [of necessity] must be tested by an examination of the facts of consciousness, with the view of ascertaining the laws of exercise applying to mental causes or forces. And when we thus pass from the physical to the mental, we at once recognize a complete difference in the laws of exercise governing the forces of the two spheres. There is much which is common to both. Effects 'certainly and invariably' follow their causes in both spheres. In both, causes are as invariable in their nature, and as certain in their results. But there is an essential difference between the mental and the physical. There is in the mental world an adjustment of forces, which is not found in the material world, except when man interposes to make the adjustment. . . . There are facts which go to show that causality in mind is not exactly analogous with causality in matter."—*Calderwood.*

substance it is adamant, or else not an axiom. Nor do I understand any better what may be meant by a modified application of an axiom. Wherein it applies, it must apply in like manner to all. Within its sphere, it is not only unalterable but universal, else it is not intuitive truth. It is freely granted that mental phenomena are widely different from physical phenomena; but do they not undergo change? Is not a volition a change, an event, something that happens or occurs or takes place? If so, then volition is caused. There seems no escape from this conclusion. No juggling with words, or twisting of the axiom will avail beyond making a temporary cuttle-fish darkness.

But it is the law of uniformity especially that is thought to be inapplicable strictly to mind. It is alleged that the exercise of volition is very variable, sometimes amounting to mere caprice; that while volition is truly caused, it is not true of it that like causes always produce like effects; that under the influence of different circumstances like causes produce various effects. To this we reply that any circumstance which has any influence whatever is a part of the cause, and the varying effect is due to variety in the cause. If like causes do not *always* produce like effects, then we must give up our axiom. Shall we do so? Is it not far more rational to conclude that the lack of uniformity in volition is only apparent, and that a thorough investigation of the causes affecting it would bring to light a perfect uniformity of exercise? Why or how volition should be exempt from the law in all its rigidity and universality is hard to see. In external nature there is a similar apparent lack of uniformity in complex cases, but the physicist proceeds with unwavering faith, or rather with clear certainty, upon the principle of uniformity, to evolve simplicity out of complexity, and to reduce multiplicity and variety to scientific unity. Unless the same process be applicable to human nature, if to be free is to be lawless, a science of mind would seem impossible.

VI.

There remain two extreme views to be noticed. The first would escape the argument for necessity by denying that the laws of causation are applicable at all to mental phenomena. It is said that causation belongs to the material universe, spon-

taneity to the spiritual universe. Spontaneity is described, not as obscure causation, but as an acting from internal rather than from external force, as a property which accounts for changes arising under influence perhaps, but not caused. It is contrasted with uniform play of fixed law in the physical world. Causation is the law of connection between physical facts; spontaneity is the ground of connection between mental facts. These two sets of facts are as distinct in their dependencies as in the fields in which they occur, and the law governing the one is not to be transferred to the other.*

With reference to this unsupported denial that causation applies to the mental sphere, let us ask: Is not the rap of a gavel the cause of attention? Is not light the cause of vision? And on the other hand: Is not grief the cause of tears? Is not anger the cause of strife? It would seem, then, beyond question that a physical force causes a mental state; and on the other hand, that a mental state causes physical action. Causation, then, connects the two spheres, and if in the one case a mental state is an effect, and in the other a cause, how can it be said that causation does not apply to mind? Can it be true that causation enters in upon mind, and departs from mind, and yet does not apply within mind? Does not the thought of St. George cause me to think of the dragon? Is not pleasure a cause of love; pain a cause of aversion? If these be not causal relations, I know not what to call them, or what law regulates them; for the law of spontaneity, as distinguished from causation, has not, so far as I know, been formulated. It is

* "All pure intellectual action is spontaneous, beyond causation, and ready to be played upon by the will. The feelings, intellectual and spiritual, are also spontaneous, that is, referable to powers of mind and not to physical forces. . . . The actions of the mind, though free, first through its spontaneous powers, and second through its choices, none the less stand in determinate constitutional relations, and remain to be operated under their appropriate laws. . . . There is order that is not causal order, to wit, thought order, emotional order. . . . Will is germinant, the only germinant thing in the universe; all else is flow. Liberty is spontaneity exercised in choice. Spontaneity is self-centered power as opposed to transmitted power. On spontaneity rests the potential—what may be as opposed to what must be."—*Bascom.*

"The human will, as the power of self-manifestation, self-assertion, and self-determination, is simply the highest grade of that spontaneity which pertains to every living being."—*Ulrici.*

freely granted that mental forces and physical forces are very widely different species, but they seem to be of the same genus; they are all forces, for to their action are attributed changes, and that is the meaning of force. That a mental impulse causes mental change, is hardly less true than that a physical impulse causes physical change.

It should be observed in general, and very suitably in this connection, that in perception an objective fact is known only by virtue of a subjective phenomenon. The change within us is attributed to a cause without us precisely for the reason that we know the change must have had a cause, and we know of none within producing it. When successive subjective phenomena, as for example the effects on me of lightning and thunder, seem to have no subjective causal connection, we posit an objective causal connection between the objective facts. When successive subjective phenomena seem related as cause and effect, we do not seek an external explanation, and do not call the act perception. Hence mental phenomena are the primordial fundamental phenomena, and perhaps in strictness the only phenomena. Subjective changes alone are known immediately; all others are inferred from these. It follows that the law of causation applies originally and primarily to mind, and if there be any transference of it, this does not take place from the physical to the mental sphere, but rather from the mental to the physical, and a law of mind is applied in explaining the facts of the external world.

VII.

At an opposite extreme from the foregoing are the views of those who grant the causal relation throughout all mental activities, and seek to save liberty and responsibility by the definition that he is free who is not hindered or prevented from acting according to his nature.* This is called free agency as distinguished from free will. In a free agent, desires are motives

* "By freedom or liberty in an agent is meant being free from hinderance or impediment in the way of doing or conducting, in any respect, as he wills."—*Edwards.* This definition is used also by some of the most rigid necessitarians; *e. g.*: "By liberty we can only mean a power of acting, or not acting, according to the determination of the will."—*Hume.*

which cause or excite volition. An object awakens a desire which, as a motive, arouses volition, and an action is the result. When desires conflict, the strongest prevails. Self-determination is a conception which is self-contradictory. Liberty and necessity are not opposed to each other, but may coëxist.

We have here a definition of liberty different from that under which we have been working. It is, indeed, justified by usage. We say that the emancipated slave is free, that an unbridled horse is at liberty, that a plant grows freely in its native wilds, and that a machine is free to move when the stay is withdrawn. That I am, ordinarily, in this sense, free, no one can deny. It is, however, a freedom not from antecedent determinants, but from subsequent impediments; not a subjective, but an objective liberty; a liberty not found in the internal exercise of the will, but in its external exercise, in the carrying-out its intent; a merely functional liberty which it has in common with the automaton. Such liberty is entirely consistent with causal necessity.

But the liberty which is essential to personality and responsibility is quite another thing. It is not the absence of restraint, but the absence of constraint; not the absence of subsequent hinderance or prevention, but the absence of antecedent compulsion or coërcion. Those who advocate the scheme of free agency allow causal constraint or compulsion, and are content with functional liberty. They invert or pervert the definition of liberty as applied to the human will; for a free-will, as distinguished from the bond-will of the necessitarian, is not a will free to act according to its nature, that is, free from impediments in accomplishing its intent, but a will whose nature it is to act freely, that is, free from determinants in forming its intent. The question in dispute is whether, in this sense, I am free. Functional freedom is granted, of course, as prerequisite; but am I free from causal constraint or determination?*

* The following definition of liberty, by the prince of modern necessitarians, is unexceptionable: "That being alone can be called free which exists solely from the necessity of its nature, and is determined by itself alone to action."—*Spinoza.* The term "necessity" here means merely functional necessity, which is properly only a limitation, not a constraint or coërcion. That is to say, every being in its normal action is limited to the performance of its natural functions. Necessity in this sense is not inconsistent with causal liberty, as shown in the following: "Absolute liberty

The scheme of free agency is manifestly the scheme of necessity in disguise. It accepts the necessitarian logic as conclusive, but by means of a modified definition it appropriates the libertarian terminology. This merely verbal inversion avails nothing. It leaves the causal argument for necessity unscathed, untouched.

VIII.

The Alps cannot be overturned. The axioms of causation and uniformity are steadfast and eternal. The argument for necessity is impregnable at these points, and so far is demonstrative. Yet it seems that libertarians have constantly tried either to set aside or to undermine these intuitive truths.* For our part, we shall not break a lance against their iron front. Let us seek elsewhere a point of attack. On looking at the first minor premise in the necessitarian argument as stated in Section II., we observe that it is not an axiom. It reads: Volition is a change. Clearly this is not an intuitive truth, though it seems obviously, palpably true, and is usually at once admitted as quite unquestionable. But perhaps here is a joint in the

consists with absolute necessity. In God we can think of no act which does not proceed from the internal necessity of His nature. Such an act also is the original one of man's self-consciousness; it is absolutely free, for it is determined by nothing external to the Ego; it is absolutely necessary, for it proceeds from the internal necessity of the nature of this Ego. . . . That only is free which acts in accordance with the laws of its own essential nature, and is determined by nothing else, either within itself or exterior to itself. Hence the individual act is the result of the free essential nature, and thus results of necessity."—*Schelling.* Let us add that functional necessity and functional liberty are the positive and negative views of one and the same limitation.

It is causal necessity, or the presence of causal constraint, which is denied by the advocates of free-will. It is inconsistent with and in strict opposition to causal liberty, or the absence of causal constraint. Its definition is fairly stated in the following: "That being is necessitated or coërced which is determined by another as to a definite mode of its existence and action."—*Spinoza.*

Much confusion in the controversy has arisen from a neglect of the distinction between the functional and the causal.

* The empiricists are commonly necessitarians; the intuitionalists, libertarians. The former could consistently be libertarians by denying the universality of the axioms and claiming freedom to be an exceptional experience. But how can the intuitionalist consistently avoid being a necessitarian, holding, as he does, to the strict universality of intuitive truth?

harness. Let us examine it; for if the argument be vulnerable, it is vulnerable only here.

A volition or complete act of will consists, by general consent, of two clearly distinct elements, choice and effort. As these are not mutually conditioned, but each is operative alone, it is evident that they should be used in the argument, not conjointly, but separately. If we ask, then, respecting effort, considered not as a force, but as a conscious act, a phenomenon: Is it a change? the answer that it is consciously a change or event seems the only one that can be given. It follows that it is caused, and so necessitated, or not free. Hence liberty is not to be found in this component of volition.

Let us settle at once the causal relations involved. Mental effort is obviously the cause directly of voluntary attention, and more remotely of muscular motion; but the cause of the effort is not quite so clear. Setting aside certain physical strivings, which, though mere reflex physical acts, are often spoken of as involuntary efforts, and limiting ourselves to effort as implying mental determination, we observe that it is caused directly, immediately by desire. This becomes apparent when we consider that the appetites often operate instinctively and blindly, that is, without hesitation, consideration or deliberation, impelling towards gratification, causing an effort to appropriate their satisfying objects. Such acts are unintelligent. Let us particularly remark the absence of any intelligent choice, the guide being natural instinct or ingrained habit. Again, we observe higher desires conditioned on intelligence, such as anger or curiosity, which sometimes act as instinctive impulses, directly causing a strenuous effort to attain their objects, without any pause of deliberation, without any note of an alternative, without any exercise of choice. There are many cases, then, which agree only in the presence of antecedent desire and subsequent effort. On the other hand, we observe that whenever there is strictly no desire, there is no effort. Hence, by the double method of agreement and difference, we may inductively infer that desire is the cause, and the only cause, of effort. Desires whose gratifications are inconsistent counteract each other more or less, and in that ratio, or it may be altogether,

fail to bring on effort. And when alternative means to a desired end are contemplated, the effort is thereby suspended until choice of the means is made. But when the desire is not hindered, its direct effect is voluntary effort.

IX.

We will now attend to the other element of volition, choice. Making this the minor term of the first syllogism in Section II., we have: Choice is a change, or event; and must conclude: Choice is necessitated.

But let us consider for a moment the character of the notion choice, that is, the election of one of two available alternatives. Its very essence is freedom. A free choice is a pleonastic phrase; a constrained choice is a contradiction in terms. No liberty, no choice; no choice, no liberty. The question is not whether I am free in choosing, which is a confusion of words, but whether there be really such a thing as choice. It is conceded that if there be liberty, it is to be found only in this residue, for all other mental states are caused. But is there a residue? Is not what we call choice only a delusive notion? Is choice real? To grant that it is, is to grant liberty. To deny liberty, is to deny choice.

Now the argument against liberty should not fallaciously grant in a premise what it proposes to disprove; it should not say that choice is a change, thereby admitting that there is such a thing as choice and liberty. It should premise hypothetically, thus: If there be choice, it is a change; and conclude thus: If there be choice, it is necessitated; and then add: But this consequent is absurd, choice cannot be necessitated, and therefore choice is not, there is no such thing.

This logical form is unexceptionable, but the truth of the conclusion depends upon the truth of the premise: If there be choice, it is a change. This premise we now deny, saying: Though there be choice, it is not a change. If we can establish this denial, the stubborn argument for necessity becomes worthless because of a false premise, and its boasted conclusion falls away unproved. Moreover, a proof that a choice is not a change will place choice wholly outside the category of causation, en-

tirely beyond the reach of any causal argument whatever. Unless this be done, there is no escape from the logic of necessity.

X.

To prevent confusion we must distinguish the act from the fact, the doing from what is done. The distinction is nice, but real. In choosing, a mental mode appears in, and then disappears from, consciousness; it is a psychical phenomenon. As a mental act, then, a choice is a change, is an event, and therefore is caused, is necessitated. That is to say, I am caused to choose. In all cases wherein an alternative is presented, that fact necessitates that there be a choice, though not at all what the choice shall be, not at all which alternative shall be elected. Not always between two positive alternatives am I necessitated to choose; I may reject both; but between every positive and its negative lies an alternative must. I must go or stay, I must accept or decline, I must turn aside or not, I must act or not act; there is no middle between A and non-A. So the mere presence of recognized alternatives determines that I must choose. Even "not to decide is to decide," as Bacon says: that is, I practically choose to let things take their own course.*

But between this constrained act of choosing and the subsequent effort to realize its intent, lies the choice as made, the preference of this over that. Evidently the choosing as an act is to be distinguished from the choice as a fact. That I decide is an act; that my decision is to do this rather than that is merely a fact. I must decide, must elect, but whether my election shall fall on this or that is quite another thing. The making an election is a movement forward under causal influence; the election itself is not a movement forward, but merely the determination in which one of two lines the movement shall be

* It is said that the Owenites make use of the following argument:

Whoever necessarily goes or stays is not a free agent;

But everyone necessarily either goes or stays;

Therefore, no one is free.

Whately would call this *Fallacia compositionis*, the term, "goes or stays," being used first divisively and then collectively. Obviously, to say that one must go, or that he must stay, is very different from saying that he must do one of the two; hence, ambiguous middle.

made. This is choice, and the question now before us is whether the determination in choice be self-determination, or rather, an uncaused fact, or whether it be caused and so necessitated.

XI.

Now can we say of a choice that it is a change? Change from what to what? Two roads lie before me. On reaching the fork, shall I take the right or the left? I take the left. The choosing the left is an event; but the preference of the left instead of the right is not an event, is not in itself a change from something prior, which is not this, to this. I have not at all altered my course. In the line of progress every step is an event; but when there are alternative paths, my preference for one while believing that I could take the other is not, in itself alone considered, an event. The change from indecision to decision is caused by the presence of alternatives between which I must choose; but the decision in favor of A rather than B is not a change from B to A, nor from non-A to A, for by the very terms themselves the state immediately prior was one of indecision.

Choice cannot be defined, since the notion is *sui generis*, simple and ultimate. We cannot analyze its content, and thereby show that it bears no mark of change. We can only dwell attentively upon the notion as formed from certain conscious activities, and ask ourselves whether it be in harmony with, or in opposition to, the notion of change. A change implies an event, and an event may be fairly defined as what was not and has begun to be. Now suppose that some opportunity for action occurs. Shall I act or not act? I elect inaction. In this election there is no change, nothing comes into being. Should I elect action, still in this election there is no change from that to this, no alteration, but only a decision in favor of this rather than that. We repeat that the passing from indecision to decision is a change; but that the decision for this rather than for that is not a change. The latter is a choice, and therefore a choice is not a change.

XII.

If upon this showing it be granted that choice is not a

change, we may proceed one step further. Let us invert the axiom: Every change is caused, or is an effect, to: Every effect is a change. This is not admissible as a formal logical conversion, but the latter proposition is nevertheless true; for it is an analytical judgment *a priori*, the predicate merely unfolding what is contained in the subject. An effect, to be an effect, implies a change, else nothing would be effected. Taking this as a major, we have the following simple reasoning:

Every effect is a change;

Choice is not a change;

∴ Choice is not an effect; or, is not caused.

By this, choice is taken entirely out of the category of causation, and, like space, time, unity, identity, infinity, etc., it stands apart, alone, peculiar, a *summum genus*, wholly distinct in kind from all things else, and must therefore be investigated, not comparatively, but as an independent and original fact.*

By the discovery of a false premise in the necessitarian argument, it is completely invalidated, and so, for aught that appears, choice and liberty may be real. By the discovery that the fact called choice does not lie in the category of causation, we are enabled to reach a conclusion more positive. Choice being uncaused, it is *eo ipso* unconstrained. Freedom is the absence of causal constraint. Hence choice is free. In other words, we have found an unconstrained, uncaused fact in the election of one of two available alternatives. We have found freedom in the fact called choice. Therefore choice is real, and human liberty is real, and I am free.

* If choice lie out of the category of causation, not only is it not an effect, but also it is not a cause. The subsequent effort to realize the object is according to the choice, not however caused by it, but by the desire which the object is fitted to gratify

HISTORICAL EVIDENCE vs. CRITICAL EVIDENCE.

[A Lecture delivered before the Summer School of Christian Philosophy, Richfield Springs, N. Y., August 28th, 1884.]

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BY Historical Evidence we mean the evidence concerning either the character of a writing or the events mentioned in it, which comes to us in the form of direct statements, either in the writing itself or elsewhere; and by critical evidence we mean the evidence which comes in the form of peculiarities of style or language or contents in the writing.

This distinction differs from the distinction of external and internal, which is sometimes made, in that it classifies all direct affirmations concerning a writing as historical, as well when they are made within the writing, as when they come from other sources.

The distinction of historical and critical may concern either the subject matter of a writing or the writing itself. The evidence offered by any written account, concerning the subject of which it treats, is of these two kinds. It consists, first, of the statements made, and secondly, of the literary phenomena which attend the making of them. For example, the Jesuit "Relations" say that one of the missionary fathers, among the Iroquois, was a man of refined tastes and of superior education. Here is what purports to be a direct affirmation of historical fact. But presently, the relator cites one of the missionary's letters. The elegant old French of the letter, the literary allusions in it, the delicate play of fancy which enters into the writer's description of his rough surroundings, are of the nature of evidence as to his taste and his education. The evidence is as real as that afforded by the testimony of the author of the "Relations," but is very different in kind. The instance is representative. In all cases,

the statements made in a writing may supposably be either confirmed or contradicted by the phenomena which appear in the writing. The statements are one source of evidence, and the phenomena are another source of evidence.

If this distinction may be thus important in regard to the facts recorded in a writing, it is far more important when the question is concerning the character of the writing itself. In the inquiry when and by whom and in what circumstances a writing was produced, the evidence is of the two kinds mentioned. If, for example, you take up a copy of the Revised New Testament, which claims, on its title page, to have been printed in Oxford or Cambridge in 1882, this claim is of the nature of ostensible historical testimony as to the origin of the volume. If on turning over the book, you found that the word *judgment* was uniformly spelled with no *e* in the middle, that such words as *worshiped*, *traveling*, had but one *l* or one *p*, and that other similar phenomena occurred, you would be reasonably certain that, in spite of the statement on the title page, the volume was not printed in the benighted regions in which the light of Noah Webster's orthography has never arisen. Or if a copy of an English play were handed you, with the statement that it was written and printed about the year 1600, you would seek for confirmation or contradiction of that statement, by looking to see whether, like the Bible or Shakespeare, it used the possessive *his* instead of *its*, whether it used *quick* only in the sense of *alive* and not in that of *rapid*, and by other similar tests. The mere evidence of the critical peculiarities, independently of all direct information, convinces any one that the Portuguese author of the little book "English as She is Spoke," derived his knowledge of English largely from French sources.

We need not multiply instances. It is clear that the evidence we have concerning the character and origin of a writing consists, first, of statements made on these points, either in the writing itself or elsewhere, and secondly, of phenomena of language or literary form or contents, discernible in the writing itself.

It is impossible to popularize a treatment of the principles which govern the use of these two kinds of evidence. From the

nature of the case, a subject in Applied Logic is dry and technical. For most persons it can hardly be expected to have any interest except that reflected upon it from the questions into the discussion of which it enters. But on the other hand, some of these questions are just now prominent enough to give interest to even the dryest theme. Did Moses write the Pentateuch? Had the book of Isaiah one author or several? Are the four Gospels the record of what their authors personally knew, or are they compilations from the yarns men had got to spinning about the founder of Christianity, several generations after it was founded? Was the religion of Jehovah originally an elevated monotheism, or was it the worship of the local demon of some cannibal tribe? For the purposes of ordinary faith and conduct, every Sunday-school child has sufficient answers to these questions within his reach; but the answers to them which will satisfy the demands of minute inquiry, the answers which will enable one readily and correctly to meet objections and solve difficulties, depend largely on the correct use of the two kinds of evidence now under consideration. For the sake of the work to be done with these tools, one may well take a patient interest in examining the tools themselves.

As to the relative importance of the two kinds of evidence, I think that the views of extremists, in the one direction and the other, are the views which are now prevalent.

On the one hand, the worthlessness of what we have called Historical evidence as compared with that which we have called Critical, is very commonly asserted, and is capable of being very plausibly asserted. What we call history, it is said, particularly what we call ancient history, comes to us through an indefinitely long chain of proof. You read in a book a statement as to something which took place generations ago. The author of the book was not there when the event occurred. He did not see it. He took the statement from another book. The author of that book took it from another, and the author of that from another, and so on. What offers itself to us as history is not ordinarily the testimony of eye witnesses, but the testimony of some unknown person as to what some other unknown person has testified that some other unknown person testified, and so back through a

series of unascertained length. The earliest witnesses were probably prejudiced as to the events themselves, and the later witnesses who reported them were more or less incompetent, or careless, or biased by some purpose which they had in view. It results from this, men say, that what we call history is often less to be depended upon than what we call fiction. But in critical evidence, it is said, the contrary of all this is true. The critical phenomena we ourselves directly observe. There is no doubt concerning them, and no room for doubt.

To repeat this, using a particular instance: All the external historical evidence there is affirms that the book of Ecclesiastes was written in Hezekiah's time. Those who regard the title of the book, "The words of the preacher, the son of David, King in Jerusalem," as indicating the author, understand that Hezekiah's men wrote the book in the sense of editing it, Solomon having originally composed it some centuries earlier. But the book is full of the peculiarities of the later Hebrew, such as are found in the books of Chronicles and Nehemiah, and even such as are found in the Mishna. On the face of it, it is much as if a book should be placed in our hands, said to have been written by King Alfred, and edited in the days of James the First of England, and on opening it, we should find that the author, from beginning to end, was familiar with Yankees and Choctaws, and Greasers and Whigs and Tories and Old Hunkers, that he designated negro freedmen as contrabands, that he was in the habit of *fixing up* everything from a bruised finger to a State constitution, that he described plank and boards as *lumber*, and understood all the current terms in the art of telegraphing. These peculiarities are phenomena which any one may examine for himself, by the simple process of reading Ecclesiastes in Hebrew. But no one knows through what hands the assertion that Hezekiah's men wrote this book has been handed down. No one knows whether this assertion has or has not grown in the process of transmission—as assertions are very apt to grow. No one knows whether the assertion was originally a known fact, or a mere guess, or a blunder. Surely, men say, it is reasonable to accept the evidence of our own direct perception and judgment, in preference to what some one affirms that some one else has

heard say that some other party has conjectured that some ancient writer supposed was perhaps the fact. In other words, it is said that traditional statements of alleged historical fact are valueless, by the side of proof from critical phenomena.

Evidently, there is truth in this position. We shall see that there is also error in it. At present the error is all the more dangerous because of the fact that it is somewhat commonly met by claims at least as extreme and erroneous on the opposite side.

The traditional statements, it is said, concerning the authorship of a writing, or concerning the events mentioned in the writing, come from an earlier age than ours. That age was nearer the time when the writing was produced, or when the events took place, and is therefore likely to represent better information in these matters than we now possess. This kind of evidence is therefore to be preferred to everything else, the evidence drawn from critical phenomena included. The latter is indeed sometimes of the nature of real evidence, but it is so slippery and intangible in its nature, that it can be allowed only a very subordinate place. It has a real use for confirming the historical statements, and for helping us to understand them. But, save in a few exceptional instances, it has not weight enough to demand a moment's consideration, if it comes into conflict with what has been handed down as history.

A somewhat astonishing expression of this view appears in the habit common among the defenders of the traditional opinions concerning the Scriptures, of using the terms "Higher Criticism," "Literary Criticism," to designate the school of criticism which attacks their position. These terms properly signify, as every intelligent person knows, that branch of learning which inquires into the structure and origin of writings, in distinction from textual criticism, which inquires concerning the text of the writings. This is the definition given by the men who introduced these terms. Probably no one would so much as propose any different definition. Under this definition, Paley's "Horæ Paulinæ" is, perhaps, the best known work in the English language, in the department of the higher criticism. Professor Green's celebrated replies to Robertson Smith are essays in higher criticism, equally with the works to which they

are replies. All the apologists who have used the argument from internal evidence for defending the Scriptures, have entered upon the domain of the higher criticism.

All this is, I believe, undisputed. Now, that the men who use the higher criticism in attacking the Bible should call their conclusions the conclusions of the higher criticism, is very natural. In thus calling them, they claim, and intend to claim, that the evidence, when critically weighed, is against the received opinions concerning the Bible. It is a part of their position that they should make this claim. Every advocate of a side claims that his side is correct. But that the defenders of the received view should, verbally, concede all this; that they, too, should apply the term higher criticism, without restriction, to the position of their opponents, and should thereby, in terms, admit all that their opponents claim; that they should thus eagerly take upon themselves the task of attempting to discredit a legitimate department of learning, to which they themselves owe more than their opponents can possibly owe—is something surprising. But it is the course actually pursued by very many who regard themselves as qualified to publish something in defense of orthodoxy. They habitually call what they attack, "The Higher Criticism," instead of insisting that it is only a peculiar and erroneous type of higher criticism. How is this to be accounted for? It would not be complimentary to the intelligence of our friends to say that they know no better. It would not be complimentary to their independence to say that some one carelessly started this habit, and the rest followed, like sheep over a fence. It would not be complimentary to their good breeding to say that they persist in using language thus, for the sake of annoying persons whom they wish to annoy. To some extent, doubtless, the habit must be accounted for by saying that these people recognize the large part which critical evidence must play, in the methods of the higher criticism; and that they think of critical evidence as mainly rubbish, which orthodoxy can well afford to give away to its opponents.

Nor is this the only way in which the current contempt for critical evidence manifests itself. A celebrated scholar makes the assertion:

"Whether the Pentateuch was composed by Moses, could be better decided by a learned Jew of the first century with his means of information, than by a learned German of the nineteenth century with his means."

And after a few lines he says:

"Upon such a point as authorship, therefore, the later ages, speaking generally, must adopt the views of the earlier, unless discoveries are made which absolutely prove that the traditional view was an error. But such discoveries are very rare."

A learned Jew of the first century, Josephus, if you please, was separated by an interval of about five centuries from the time when Ezra and Nehemiah wrought together in Jerusalem, and, say fifteen centuries from the time of the death of Moses. The difference between him and the learned German of the nineteenth century consists in the fact that he may have had—probably had—access to some documents, oral traditions, and other sources of external historical statement, which are not now accessible; and on the other hand, that he knew vastly less than the learned German as to the phenomena of the Greek language, the phenomena of the Hebrew language, the whole subject of the comparison of languages and literatures, the history of the ancient oriental nations, and of the different Greek empires, comparative ethnology in all its branches, historical geography, and many other such matters; and further, that he had no such training as the German has, in the habit of analyzing and comparing phenomena of this sort. In other words, the proposition is that evidence in the form of alleged historical statement is worth so much more than evidence from critical phenomena, that the slight advantage of having lived only from five to fifteen centuries after the events is more than sufficient to compensate for measureless critical disadvantages.

Assertions of this sort have truth in them. But on the whole, we are no more ready to accept the proposition that alleged historical statements are of supreme evidential value and critical phenomena of only incidental value, than to accept the proposition which reverses these relations. While it seems to be true that these two are the theories now current, it is also true that the verdict of the human mind is against them both. On the

one hand the substitutes so profusely offered, on alleged critical evidence, for all the great traditional beliefs of mankind—substitutes often as brilliant as soap-bubbles, and just about as lasting—do not, on the whole, inspire confidence in the claims made for the superiority of evidence of this sort over historical testimony. And on the other hand, the recognized instances in which traditional opinions have been utterly disproved by the examination of critical phenomena are by no means so rare as the author cited above seems to imagine.

His learned Jew of the first century is a sufficient instance against him, on this point. This learned Jew, Josephus, devotes an entire chapter to an abridgement of the account in the so-called letter of Aristæus, describing the origin of the Septuagint translation of the Old Testament. It was clearly his opinion that this letter was the authentic production of a Greek philosopher who was an intimate at the court of Ptolemy Philadelphus. So far as appears, this was the universal opinion of his time, the New Testament, however, being silent in the matter. A little later, all the early Christian fathers held the same opinion, and although the Jewish scholars had every motive for contradicting it, there is no sign that they ventured to do so. Now this letter of Aristæus, in the parts of it cited by Josephus, represents Demetrius Phalereus as alive and influential at the court of Philadelphus, after that monarch married his sister Arsinoe. But it is a known fact that Demetrius died before that marriage. The letter presents other similar phenomena. On the evidence of critical phenomena like these, every one is now convinced, in spite of the traditions of the earlier ages to the contrary, that this account was not written by the Aristæus who was intimate in Ptolemy's court at the time, but by some man who lived long enough afterward to be unfamiliar with minute facts as to dates and other like matters.

This same learned Jew, with the approbation of all the patristic writers, with incidental confirmations from the Jewish traditions, and without contradiction from anybody, affirms the truth of the statement of the letter of Aristæus, that the Septuagint translation was made by seventy-two Jews sent from Jerusalem. But there are probably not five successive pages

anywhere in the translation, in which it is not apparent, first, that the Greek of the translators has the Alexandrian peculiarities; secondly, that they were so limited in their knowledge of classic Hebrew that any unusual word or construction puzzled them; and third, that they were often quite unfamiliar with Palestinian topography, and other local facts. On the strength of critical evidence like this, it is now not doubted that the uniform and abundant voice of historical tradition is here mistaken, and that these translators were Alexandrian Jews.

Instances are abundant. The opinion which treats the evidence of critical phenomena with contempt is as unreasonable as that which treats with contempt the evidence of historical testimony. We cannot fairly dismiss the matter by saying that one of the two must regularly be preferred to the other, or that one is to be used as principal evidence and the other only for confirmation. No rules like these have any general application. It depends on the peculiarities of each case which kind of evidence is to be counted, in that case, as principal and which as subordinate. When the two kinds of evidence conflict, it depends upon the circumstances in which the conflict arises, which kind is to be preferred. Both kinds of evidence afford valid proof. Both need to be carefully sifted. Both must be tested, ultimately, by the same logical principles.

For settling their relative value, the following points commend themselves:

I. In comparing historical evidence with critical evidence, we need to take into account *the limitations of the critical argument.*

We are told that the critical phenomena appeal directly to our powers of observation, and are thus more certain than any human testimony in history can possibly be. This is true within certain limits. But within the same limits, the critical argument is as much less explicit than the historical as it is more certain. The Talmud affirms directly, in so many words, that the men of Hezekiah wrote Ecclesiastes. From the nature of the case, the critical phenomena make no direct affirmation as to who wrote Ecclesiastes. That which is certain, in the critical phenomena, that which appeals directly to our powers of observation is, that these phenomena exist. They can be accounted

for by supposing that the book was written much later than the times of Hezekiah. But, at the outset, they may supposably be accounted for by other suppositions. The evidence of the critical phenomena is certain, as far as it goes, but is not, like the historical statement, explicit concerning the point in hand.

This instance of difference between the two sorts of evidence is typical. The difference exists, indeed, on a sliding scale, and ultimately, perhaps, vanishes altogether. Ultimately the historical statement itself must be treated as if it were a mere effect. It must be tested by asking the question: Shall we account for the existence of this statement by supposing that it is true, or in some other way? Ultimately, too, the critical proof may be made specific as to the point in hand. But in any particular process, intermediate in a train of reasoning, the typical difference exists. The historical testimony directly affirms or denies the conclusion at the moment pending, while the critical phenomena are merely an effect, to be accounted for by either affirming or denying the conclusion. Relatively to one another, the historical statement is doubtful in point of fact, but certain in its application to the case in hand, while the critical phenomena are undoubted in point of fact, but not certain in their bearing on the case in hand.

We need to make this analysis a little more minute. In most critical arguments, we have to consider the phenomena in three different aspects:

First, in themselves;

Secondly, in their generic relations, and

Thirdly, in their bearing on the question in hand.

It is only in the first of these three aspects that the critical phenomena appeal directly to our powers of observation. Into both the others enter the same sources of error, through mistakes of judgment and mistakes in the transmission of knowledge, which enter into alleged historical statements.

We continue to illustrate by the case of the book of Ecclesiastes. The critical phenomena are there. There are certain peculiarities of words, of spelling, of declension, of construction. These are unmistakable facts. They appeal directly to the judgment of one who reads Hebrew. He sees them, just as the

English reader sees when musick is spelled with a *k*, or honour with a *u*. But in this shape, the facts have no bearing whatever on the question whether the men of Hezekiah wrote the book. All men have their peculiarities. At the outset, we might ascribe these peculiarities to one set of men as well as to another. We have to take a step further before we reach anything distinctive.

We take this second step. We look at the phenomena, not in themselves, merely, but in their generic relations. The peculiarities are those which are also found in the later books of the Old Testament, and to some extent in the Mishna, and are therefore commonly regarded as belonging to the post-exilic Hebrew. Now our phenomena show that they have a bearing on the question whether Hezekiah's men wrote the book. But in proportion as we have gained in explicitness, we have lost in directness, at least, if not in certainty. It is now competent for some one to argue that since Hezekiah's men, or perhaps Solomon himself, wrote this book, therefore these phenomena existed in their days, and are not confined to the later Hebrew. If it be accepted as true that the phenomena are really post-exilic, it is so accepted not on the ground of the one premise of direct observation, but on the ground of that, combined with other premises, which are the result of induction and generalization, and of conflict of opinions brought to a successful close.

But the evidence is not even yet explicit enough to answer the purpose. If we admit, not merely that the phenomena are there, but that they are of the nature of later Hebraisms, that does not prove the late origin of the book. Their bearing on this question depends upon the further consideration that their presence in the book is an effect, and is to be accounted for, if convenient. If the book was written as late as Nehemiah's time that accounts for their presence. But it is also possible that some one will prefer to account for them as errors made by some copyist, or as the product of predictive inspiration, or in some other way. Or it is possible that some one will take the ground that the proof of the early origin of the book is too strong to be overcome, even if we have to regard the presence of these later elements as a difficulty not satisfactorily solved. To establish

any one of these views absolutely, its advocate must show, not merely that it will account for the phenomena, but that it is the only view that will account for them. To establish any one of the views as against the others, its advocate must show, at least, that it accounts for the phenomena better than the others.

It is clear, therefore, that the claim that the results of a critical argument are based on direct observation is subject to these two reductions: first, other elements besides those which are directly known commonly enter into the premises; secondly, yet other elements, and, from the nature of the case, very often extremely uncertain elements, commonly intervene between the original premises and the conclusion.

II. Again, in making up our estimate of the two kinds of evidence, we need to remember that, in a large majority of instances, the critical evidence is directly dependent upon the historical, *for the very existence of its evidential character.*

We have already had occasion to notice that the argument from critical evidence is very largely that which Archbishop Whately calls the argument from effect to condition. We find the critical phenomena in existence, as an effect. If we suppose the previous existence of certain conditions of things, it will account for this effect. We therefore infer that these conditions actually existed. Now this argument admits of all degrees of probability. The condition inferred may be an absolute *sine qua non;* or may be a barely possible explanation of the fact, or may be anything between these. That which adequately accounts for an effect, if the effect cannot be otherwise accounted for, may be fairly inferred form the effect, either with certainty, or with a degree of probability approaching certainty. But that which accounts for an effect only in part can be inferred from the effect with only a low degree of probability, even if it be the only account; and even that which fully accounts for an effect, if several other accounts equally plausible can be given, can only be conjecturally inferred from the effect.

In critical evidence, as every critic will admit, we have largely to deal with argument which thus falls far short of being demonstrative. A very large portion of the reasonings from the critical phenomena presented by any document exist, at the outset,

only in the form of suppositions or conjectures. The evidence is, in this sense of the term, mainly or purely hypothetical. And it is just at this point that historical testimony may come in to give to critical inferences a validity which they would not otherwise possess.

In treating of actual events, particularly where direct testimony exists, merely conjectural inferences, if they stand alone, are to be counted as of very little weight. This is an established law of evidence. In these instances, the mere fact that a certain hypothesis may perhaps account for certain phenomena does not transform the hypothesis into a reality. It may be equivalent to one leg of a tripod, and thus help support a heavy superincumbent weight of argument; but not unless the other legs are also present. It is not argument to say: They may have done so and so, in this case—because every one knows that it is also possible that they may not have done so and so. It is not argument to repeat this twice, or five times, or a hundred times. It is almost impossible to obtain genuine cumulation in such reasoning as this, for every fresh instance you cite brings with it some new alternative.

If you rest a stick slanting on the ground, it will fall of its own weight. You will not help the matter if you set up a hundred other sticks slanting in the same direction. If you are going to make them support themselves or support anything else, they must have something to brace against. They may possibly be made to brace up something that was otherwise very weak, even to the extent of giving it tremendous strength, but without something to brace, they are worthless for bearing weight. It is just so with hypothetical explanations in matters of historical fact. You say: They may have done so, in this case. The reply is: Yes, but again, they may not. Is there any direct proof that they did what you guess them to have done? If they did it, some vestiges of their having done it, or having done something like it, must be still in existence. Unless you can find evidence of a different sort, your guess that they did it is fairly neutralized by other people's guesses to the contrary. You must produce some proof that is not a mere hypothetical explanation of phenomena, or all the hypotheses you can gather

are like slanting sticks which fall by their own weight. The character and amount of the positive evidence may not be so important. If you can get anything at all to brace, you may possibly be able to brace it strongly enough to make it stand. But unless you can find something, your hypotheses are not merely weak arguments—they are no arguments at all for the purpose of establishing positive conclusions.

A good illustration of this particular law of evidence may be found in connection with the common attempt to prove from the Septuagint that the text of the Hebrew Old Testament has been considerably altered since that translation was made.

It is a familiar fact that most of the Greek writings which we have were transmitted to us by copyists who were not careful to be verbally accurate, so long as they perserved the literary contents of the writings they copied. It is also a familiar fact that the Hebrew Scriptures have been handed down on a very different plan. Whether we credit the Jewish scribes with the highest degree of critical excellence, or sneer at them, as men superstitiously devoted to the letter of their sacred writings, we have the same result, namely, that the Hebrew Bible has been transmitted in a minutely accurate text, instead of being transmitted, like the Greek writings, in many varying texts. This accuracy of transmission dates back as far as our means for full information in the matter extend; and these extend to a date early in the Christian era.

Until recently it has been undisputed that the Hebrew Old Testament was subjected to these same precautions for securing its unvarying correctness, from the very beginning. But some critics now hold that, during the first centuries before and after the birth of Jesus, these precautions had not yet been adopted, and that, in those centuries, many copyists' variations were made in the text.

The most prominent argument in proof of this is the fact that our present copies of the Septuagint Greek translation of the Old Testament, made in the second or third centuries before Christ, contain very many expressions which cannot possibly be translated back from the Greek into the Hebrew text which we now have. It is inferred from this that the translators must

have had before them copies of the Hebrew which differed from ours, in a very large proportion of the places where the differences are now found.

Now to begin with, in this argument, it is an admitted fact that our present Masoretic text was handed down with critical care, for at least 1300 years before the dawn of the modern science of textual criticism. Hence there is nothing improbable in the claim that it was so handed down for four or five centuries more, in addition to the thirteen. This claim has in fact been made, steadily and distinctly, by the succession of men who transmitted the text.

If a radical change in the mode of its transmission was actually made, say in the second century A.D., it was made by men who were voluminous writers and controversialists. It is incredible but that some mention of it, or some allusion to it, should have been made in their writings, or in the writings of their opponents, and handed down to us. But after some generations of industrious search, the critics do not claim to have discovered even one such allusion. This is all the more remarkable because the Christian fathers actually charge the Jews with corrupting the Hebrew text. If the Jews had then recently initiated new methods of dealing with the text, these would certainly have furnished details for their opponents to cite in proof of this charge; but they cite nothing of the kind.

At the time when this change is alleged to have been made, a large number of copies of the Old Testament must have been current among Christians and even among heathens, as well as among Jews, and this in different parts of the world. It is hardly credible that all vestiges of these copies and of their differences from the newly constructed text should have become obliterated. But it is distinctly admitted that no such vestiges are known to exist, though there has been industrious search for them.

Further, there is considerable positive evidence, in the New Testament, in Philo, in Josephus, in the alleged letter of Aristæus, in the Apocrypha, in the Jewish and Christian traditions of the earlier Christian centuries, that very scrupulous care of some sort was taken of the text of the Old Testament during

the centuries preceding the time from which all the critics admit that it has been accurately handed down.

We are citing these facts, let us remember, not for the purpose of arguing the question on its merits, but for the purpose of making it illustrate the law that critical evidence is often dependent upon historical evidence for its right to be admitted into an argument. Suppose we concede all that any one would claim as to the insufficiency of the testimony already mentioned, for completely establishing the inviolate character of the Old Testament Hebrew text. It is, at least, of considerable force in that direction; and being so, it affords to the advocates of the traditional view that which, at the outset, their opponents lack, namely, a basis for the introducing in evidence of the critical phenomena. Every instance which the former introduce, *is in support of this body of historical evidence*, and is, in turn, supported by it. It is not a slanting stick unsupported, but one with something to brace against. At the beginning of the argument, at least, the reverse is true of their opponents.

At first blush, one might think that an instance which is equally capable of being explained as a change made by the copyist of the Hebrew text or as one made in the process of translation, might be claimed with equal fairness on either side of the controversy. But this would be a superficial view of the case. If you explain the variation as a blunder on the part of the translator, you explain it by a known fact; for it is admitted that these translators were quite apt to blunder. If you explain it by alleging the careless copying of the translation, you explain it by known facts, for no one doubts that the Greek manuscripts of the translation were often very carelessly copied. If you explain it as comment or paraphrase or annotation made by the translator or by some Greek copyist, you explain it by facts; for undoubted phenomena of this sort appear in the existing Greek copies. If you explain it as handed down, through the translator's recollection and by his carelessness, from some inferior copy which he had studied at school or elsewhere, and which differed from the standard copy which he had before him, you explain it by a known probability; for it can hardly be otherwise than that the translators were so influenced. If you explain it as

an oral misunderstanding, you explain it by something which we independently know must have probably occurred. An so on, through a list of similar ways of accounting for the variation. But if, in the process of proving that the Hebrew text has been changed, you explain the variation by the supposition of such change, you explain it by something that is not yet known even as a probability. There is a vast difference between thus explaining phenomena by known facts and explaining them by the aid of otherwise baseless hypotheses. Facts are better than guesses, for purposes of explanation.

These conditions of the argument may supposably change, as the induction progresses, but they are the conditions which exist at the outset. As long as these conditions continue, those who maintain the traditional view reason validly when they meet objections by merely conjectural replies, and gather mere slight coincidences into cumulative arguments. For, in their reasoning, no particular consideration of this sort stands by itself. Each connects itself with the great body of independent direct proof. And on the other hand, precisely similar reasonings, by their opponents, are invalid, until the latter have also established for themselves a basis of proof.

In other words, each reasoning process of this kind may be thrown into the form of a syllogism, thus:

If the Hebrew text of the Greek translators agreed with ours, this peculiarity is to be explained so and so.

But we have shown strong reasons for holding that it did agree with ours.

Therefore, this explanation is probably to be adopted; and being adopted, confirms the opinion that the texts are identical.

This is evidently correct reasoning, and is capable of being made genuinely cumulative; so that a sufficient number of even unimportant instances may at last render the argument impregnable. On the other hand, the similar syllogism on the other side would, at the outset, be utterly valueless, because it would lack a minor premise. It would take this form:

If the Hebrew text of the Greek translators differed from ours, the peculiarity is to be explained so and so.

But whether they differed is what we are trying to find out.

Therefore, we adopt this explanation, and regard it as proving that they differed.

Evidently this is not reasoning. The minor premise does not exist except in the shape of an inquiry or of a guess on the part of the reasoner. The only legitimate inference is that the interrogation in hand is interrogative.

In some instances, indeed, the critical argument may find conditions which are genuinely the *sine qua non* of the effect in hand, and may thus establish for itself, independently of historical proof, a basis on which to collect the less decisive instances into a truly cumulative body of reasoning. But in most instances, it is dependent, for this basis, on proof external to itself. And to note this principle and apply it, is to destroy at once a vast proportion of the weapons by which what calls itself criticism is in the habit of attacking received opinions. Argument which, being reduced to syllogistic form, is found to have only one premise, is not argument, but fallacy.

III. As the critical argument is thus ordinarily dependent upon the historical for one of the essential conditions of its validity, so in the third place, *the historical argument is dependent on the critical for the tests which render it trustworthy.*

The matter of testing conclusions by means of independent lines of proof will presently be considered, but is not the matter here referred to. It is the sifting of the testimony to which we now give attention, as distinct from the testing of the conclusions. No one would for a moment think of accepting, at its face value, everything which purports to be historical statement. That would be the part of the silliest credulity. Every one admits that statements must be sifted before we accept them. But on what principles shall we do the sifting?

It is easy to reply to this that we must ascertain whether the witness is competent, whether he had opportunities for knowing, and good habits of discrimination as to what he knew, whether he was honest, whether he had especial motives for telling the truth, or the contrary; and to add other like rules. Within their own field, all these are good methods for ascertaining the credibility of testimony. But suppose your evidence is in the form of a roll of papyrus, found upon an Egyptian mummy.

What can you find out concerning the competency or the honesty of the scribe who wrote that roll? What can you learn as to his personal habits, or his relations with the man whom your mummy used to be, or the fee he received for writing the roll? Or suppose your witness is an inscribed brick, dug up from a heap of Assyrian rubbish, or a bunch of leaves of mouldy parchment, recovered from an obscure corner of some old convent, or an anonymous document, found in some ancient collection. Doubtless the principles which underlie the rules commonly laid down apply in all these instances, but the rules themselves can be used only to a very limited extent. It will not answer for us to reject all evidence of this sort, on the ground that there is nobody alive to testify that he was personally acquainted with the witnesses, and knows them to have been persons of good character; or to testify that he is familiar with the hand-writing of the witness, and recognizes it in the document in hand. It will not do to accept all such evidence, on the ground that the witness has no neighbors living to swear that they would not believe him under oath.

In fine, the various rules of evidence employed in the courts are valuable. But in the weighing of evidence, there is a difference between a judge in a court of law and an investigator. The courts must reach a decision, and will make the decision consistent with truth, if possible. The investigator must maintain consistency with truth, and will reach a decision, if possible. It follows that the rules for sifting evidence which are applicable in one case, will not always apply in the other.

The method of believing about half or three-quarters, or some other fraction of what a witness says, is sometimes called a critical sifting of facts. Unfortunately, many people seem to expect to have their facts discounted in this way, and inflate their facts beforehand, like booksellers' prices, so as to be ready for the discounting process. And the discounting process affords no probability of reaching the truth. It is comparatively easy to discern that a witness is more or less suspicious, but it is entirely another thing to ascertain the percentage in which he deviates from the truth; or having ascertained this, to calculate the requisite corrections. A mere random reduction

of statements gives no assurance of a truer understanding of a matter.

Practically, we are all apt to adopt a very simple plan for sifting testimony, namely, that of receiving all statements which favor the view we are disposed to take, and rejecting or minifying those which conflict with that view.

There is something better within the reach of those who are willing to take the trouble to be careful students. We have no room here for details, but a general statement of this better method is, that we should apply to historical statements precisely the same tests which we apply to critical phenomena. The statement is itself a fact to be accounted for. If it is true, that accounts for it. If it is but partly true, that may account for certain peculiarities attending it. Its relations to other statements and to other facts are also to be accounted for. This principle is applicable in an immense variety of details. The distinct recognition of it, and yet more, the habit of accurately applying it, afford an inestimable advantage for the correct interpretation of historical evidence.

This method is especially valuable in cases where the character of the witness is suspicious, or is unknown. It does not necessarily follow from this that the testimony is false. A liar may sometimes tell the truth. We may come to see that, irrespective of the character of the witness, it is impossible for the testimony to have assumed the form and the relations which it has assumed, except on condition of its being true. And whether we reach this result or some other, the more successful we are in reducing evidence to forms in which we can directly test it by our own faculties, the more rational will be the conclusions at which we arrive.

IV. In comparing historical with critical evidence, we need correctly to understand the nature and value of *the presumption in favor of historical testimony.*

Not seldom the advocates of historical testimony make the mistake of assigning to this presumption the same office in an investigation that it would have as a rule of debate or a rule in a court of justice. In the debate, or in the court, it is necessary to reach a decision, and it is therefore correct to rule that if the

case is not decided by the evidence, it shall be decided by the presumption applicable to it. If the evidence does not show whether the accused is innocent or guilty, the decision shall be in favor of his innocence. If the evidence adduced by the two sets of debaters is evenly balanced, the decision shall be against the party on which lay the technical burden of proof. This use of the presumption is never legitimate in scholarly investigation. Investigation is not a struggle for victory over an opponent, but a search after truth. Here we desire no decisions except those which are justified by the evidence. If the evidence does not decide the matter, the matter should be left open—not closed by an arbitrary application of a presumption. There is no need of our knowing all things—deciding every question. There is pressing need of our avoiding all baseless claims to knowledge.

According to the citations made earlier in this paper, we must hold to the traditional view as to the authorship of a writing, unless discoveries are made which "absolutely" disprove that view. That is to say, if the evidence preponderates considerably against the commonly received view, but not quite decisively, then the decision must be against the evidence. It must be based, not on the evidence, but on the presumption in favor of the received view. This would be a good rule in the case of a man on trial for his life. But even as a rule for governing a debate, it would be bad; and as a law of investigation, it is outrageously bad. As a matter of victory between debaters, it might be fair to say that if the evidence adduced were evenly balanced, the decision should be rendered according to the presumption in favor of the received view. But in the search for truth, even this rule cannot be accepted. Investigation knows no basis but evidence. If the evidence is evenly balanced, we must acknowledge to ourselves that we do not know. If it preponderates slightly in one direction, we must accept that view provisionally. Only a reasonably strong balance of proof justifies a decision. When the presumption is merely formal, its only proper office is to control the form of the reasoning. In cases where the presumption also includes within itself something of the nature of evidence, that evidence is entitled to its

own proper weight and no more, whether that weight amount to decisiveness, or to something very much less. But in no case may an investigator decide a question upon presumptions as distinguished from evidence. Mere logical presumption is not rock; it is shadow. Shadow has its uses; but it is folly to build important doctrines upon foundations made of shadows.

This abuse of building upon presumptions as if they were evidence is common enough to prevent its being greatly surprising that there should be reactions against it, under the influence of which men ignore altogether the presumption in favor of what purports to be historical statement. But to account for this ignoring is not to justify it; and it is altogether unjustifiable. Even the presumption which is only a shadow, the merely formal presumption, has its important uses. It shows the lines and directions in which the investigation should be carried on. But the presumption in favor of testimony is more than merely formal. The existence of a statement of fact is itself a fact, in addition to the fact stated, and is to be accounted for. The most common, and therefore the most probable account of the existence of such a statement is that the statement was made because the fact stated was true, or partly true. It is difficult for even the most accomplished liar to make a statement that shall have no relations whatever to the truth. A statement is to be rejected only because there is some real reason for rejecting it, not as a matter of mere conjecture or suspicion.

The presumption in favor of what purports to be a historical statement is not necessarily destroyed by showing that the statement cannot be true, in the sense in which it has commonly been understood. Our understanding of statements is largely affected by the associations with which we connect them, in our own minds. It is not merely possible, but is a very frequent experience with most of us, that a thing turns out to be untrue in the sense in which we understood it, but true in the sense in which it was intended. Men have commonly understood Genesis as giving an account of a universal deluge. But one who holds it to be proved that the deluge was not universal, may still hold that the account in Genesis is true, provided it appears, on examination, that the account may fairly be understood to mean something less than a universal deluge.

The presumption in favor of statements found in history does not entirely cease, even when two statements seem to be discrepant. In such a case, we should at least ask the question what each statement means, *as limited by the other*, and see if this will not solve the difficulty. We are here in danger, to be sure, of being accused of substituting a minimized meaning of the historical proposition for its natural meaning. But we are not guilty of this, provided we have duly followed the evidence. The fact is that what seemed to be a minimized meaning, when the evidence was but partly in, is shown to be the natural meaning, now that more of the evidence is in. What appeared to be the natural meaning, when we knew less concerning the matter, has been superseded by a better understanding of it, now that we are better informed.

Where there is reason to think that a better knowledge of local usages and circumstances would remove the difficulties from what is ostensibly a historical statement the presumption in its favor is not entirely destroyed, even by our present inability to remove those difficulties. Particularly in this class of cases, the attacking critic has no right to reject the statement till he has looked for the *supposable* explanation, in the usages of the place or the times.

Suppose one should read that a certain event happened on a certain Philadelphia street at No. 6407. He might at once test this statement by saying that the house-fronts in Philadelphia, counting in, for simplicity in computation, the width of the cross streets, probably do not average less than 24¾ feet; that No. 6407 would therefore indicate a street at least 30 miles and 173 feet in length, or at least 15 miles and 99 feet, if we count the fronts on both sides of the street; that so long a street in that locality is impossible; and that we must therefore reject the account given as unhistorical. The true reply to this would not be to say that the 6 was probably a crooked 1, made by some careless copyist; or that some author mentions a street 30 miles long in some other city, which shows that 30 miles is not an incredible length for a street; or that some other author speaks of house-fronts only 9 feet wide, and if this were the width of the house-fronts in Philadelphia, it would reduce the street in question

to reasonable length; or that the street may have been miraculously prolonged across the Delaware. In distinction from all these attempts, one ought to begin by ascertaining what No. 6407 means, in the case of a Philadelphia street; that is, what it means when limited by the facts which those who use the term naturally have in their minds when they use it. By these other processes, we might succeed in showing that the critic's attack is not conclusive; but when we have ascertained that No. 6407 is the fourth house on one side of the sixty-fourth block on the street in question, and that the number was never designed to indicate how many houses there were on the street, then we have not merely foiled the critic's attack, but have also done something vastly more important—namely, ascertained the truth in the case.

It is not improbable that the alleged extravagant numbers of the thousands of Israel, in the wilderness and afterward, may be accounted for by supposing some such technical plan of enumeration. But however this may be, and whatever other principles this instance may illustrate, it shows that an apparent historical statement, in virtue of the presumption in its favor, is entitled to a fair hearing in explanation of apparent difficulties, before we decide that it is worthless.

This presumption is not wholly obliterated, even in a case to which the maxim "False in one, false in all" can be fairly applied. If a statement is untrue in some particular, or even untrue as a whole, that casts suspicion on every part, but still there is probably some truth in it somewhere. And if it is utterly untrue, the statement itself yet remains as a fact—probably as a somewhat remarkable fact—and in that capacity, is still a part of the evidence in the case. Merely to question a statement until you find, or imagine you find, some flaw in it, and then throw it contemptuously away, is the reverse of the true method.

V. Finally, in comparing critical evidence with historical, we should remember that both alike claim our attention, in virtue of their being *independent lines of proof*.

Apart from the special relations between them which have hitherto occupied us, they have the general relation which exists in all instances of independent reasonings. The historical argu-

ment is stronger when supported by the critical, and the critical when supported by the historical. Either, if unsupported by the other, has elements of weakness. We have no logical right to neglect the one or the other.

The two kinds of evidence commonly co-exist. It is seldom that a case depends exclusively upon one class of proof, and offers no opportunity for the other. And as the truth in the case is always true, it is attested by both kinds of evidence, if both are rightly understood. If the historical testimony shows that Moses wrote the Pentateuch, then the critical marks in the Pentateuch, correctly interpreted, show the same thing. If the critical marks show that the Pentateuch was written a thousand years later than Moses, then the historical testimony, taken at its true value, shows the same. Whatever be the truth, both kinds of evidence, when each is completely discovered and sifted, favor that truth. It is impossible that either shall prove the contradictory of it, because that contradictory does not exist to be proved. A case, therefore, made out on either kind of evidence, without the other, is technically, and perhaps seriously, incomplete. It is liable to the supposition that, on exploring the other field, we may find conflicting proof which will overthrow the conclusions we now regard as settled. In some cases this incompleteness is merely technical. But in a multitude of instances, it is actual as well as technical. Comparatively few of our results are reached with such a degree of certainty, that we can afford to neglect the opportunity of testing them by independent lines of proof. Where the results of the two forms of evidence appear to be hopelessly in conflict, it is not safe to ground a final decision on the imagined superiority of the one or the other. If our conclusion is true, the two ought not to be in conflict over it. It ought to be supported by both. We can hardly regard the result as settled until, in addition to having weighed the evidence, we have harmonized the evidence.

Where the results of the two lines of proof seem to be in conflict, it will be as useful as we found it to be in the case of alleged discrepancies in historical testimony, to ask what each conclusion means, as limited by the other. In polemical discus-

sions, we are not always anxious to do this. It is a common form of error, to prefer that interpretation of testimony which brings it into conflict with the evidence of the critical phenomena. The combative instinct is strong in men. We are sometimes so eager to antagonize one another, as to blind us to the fact that no real ground of antagonism exists. As an illustration of this, note the following citation:

"The Old Testament, though Hebrew in language and modes of expression and forms of thought, is not Hebrew literature, but divine revelation; because literature, properly so called, is the natural and spontaneous product of a national mind."

"The Old Testament . . . is not Hebrew literature, but divine revelation." To this a great chorus of critics fling back the defiant reply: The Old Testament is Hebrew literature, and therefore is not, in the sense commonly intended, divine revelation. In each case, the alternative is a *non sequitur*. If the Old Testament is a divine revelation, that does not prevent its being, genuinely, a national literature. The supernatural is not the unnatural. If God choose, it is just as competent for Him to give a revelation that shall have the outward form of a national literature, as to give it in any other form. And on the other hand, if the critical phenomena show that this literature has all the ordinary characteristics of a national literature, or of a distinct part of such a literature, that does not prevent its being also God's revealed word to men. National spontaneity no more excludes the supernatural, or the miraculous, than does individual spontaneity. These are questions of fact as to God's method of revealing himself. They cannot fairly be used to discredit the kinds of evidence on which they are respectively based. It is competent for one who regards the arguments for both conclusions as sound, to affirm that we have here a divine revelation given in the form of a national literature.

It will not always be possible, however, for us thus to see how all the evidence meets in the true conclusion. Sometimes, elements of conflict will yet remain. Here again the true course of the investigator is plain, and is different from that habitually taken by many. The true course is simply to recognize the fact

that, to this extent, the case is yet waiting for new light. A suspended judgment is not a desirable result, in itself, but it is preferable to a judgment not well grounded.

In closing, let us recur to a distinction which we made at the outset. The evidence upon which rests the obligation to enter, without delay, upon the duties and the blessed experiences of our holy religion, is not evidence which depends upon fine-spun discriminations. It is level to the apprehension of anyone who is capable of making a common-sense decision as to what is good for him, in any matter of choice. Such distinctions as we have been insisting upon are not essential to the intelligent offering or the intelligent accepting of Christ and His salvation. But in addition to the simple offering and accepting, it is of immense importance that we should extend the realm of our knowledge in these matters. Especially do we need to be able to meet objections by answers that shall be genuine, and not merely plausible; answers that shall actually remove the difficulty, instead of laying us open, by their weakness, to fresh assaults. Some of the most momentous themes of human thought, therefore, are those in regard to which historical proof and critical exist together. On such questions we ought not to be content to rest a final verdict on anything less decisive than the agreeing evidence of both groups of witnesses.

THE LATE PROFESSOR AGASSIZ once said to a friend: "I will frankly tell you that my experience in prolonged scientific investigations convinces me that a belief in God—a God who is behind and within the chaos of vanishing points of human knowledge—adds a wonderful stimulus to the man who attempts to penetrate into the regions of the unknown. Of myself I may say, that I never make the preparations for penetrating into some small province of nature hitherto undiscovered without breathing a prayer to the Being who hides His secrets from me only to allure me graciously on to the unfolding of them."

PROFESSOR FARADAY'S CELEBRATED LECTURE ON THE EDUCATION OF THE JUDGMENT.

[*From the London Edition of "Modern Culture."*]

I TAKE courage, Sir [Prince Albert occupied the chair], from your presence here this day, to speak boldly that which is upon my mind. I feared that it might be unpleasant to some of my audience, but as I know that your Royal Highness is a champion for and desires the truth, I will believe that all here are united in the same cause, and therefore will give utterance, without hesitation, to what I have to say regarding the present condition of mental education.

If the term education may be understood in so large a sense as to include all that belongs to the improvement of the mind either by the acquisition of the knowledge of others, or by increase of it through its own exertions, then I may hope to be justified for bringing forward a few desultory observations respecting the exercise of the mental powers in a particular direction, which otherwise might seem out of place. The points I have in view are general, but they are manifest in a striking manner, among the physical matters which have occupied my life; and as the latter afford a field for exercise in which cogitations and conclusions can be subjected to the rigid tests of fact and experiment—as all classes employ themselves more or less in the consideration of physical matters, and may do so with great advantage, if inclined in the least degree to profit by educational practices—so I hope that what I may say will find its application in every condition of life.

THE GOSPEL BEYOND THE REACH OF SCIENCE.

Before entering upon the subject, I must make one distinction which, however it may appear to others, is to me of the utmost importance. High as man is placed above the creatures around him, there is a higher and far more exalted position within his view; and the ways are infinite in which he occupies

his thoughts about the fears, or hopes, or expectations of a future life. I believe that the truth of that future cannot be brought to his knowledge by any exertion of his mental powers, however exalted they may be; that it is made known to him by other teaching than his own, and is received through simple belief of the testimony given. Let no one suppose for a moment that the self-education I am about to commend in respect of the things of this life, extends to any considerations of the hope set before us, as if man by reasoning could find out God. It would be improper here to enter upon this subject further than to claim an absolute distinction between religious and ordinary belief. I shall be reproached with the weakness of refusing to apply those mental operations which I think good in respect of high things to the very highest. I am content to bear the reproach. Yet, even in earthly matters, I believe that the invisible things of Him from the creation of the world are clearly seen, being understood by the things that are made, even His eternal power and Godhead; and I have never seen any thing incompatible between those things of man which can be known by the spirit of man which is within him, and those higher things concerning his future which he cannot know by that spirit.

Claiming, then, the use of the ordinary faculties of the mind in ordinary things, let me next endeavor to point out what appears to me to be a great deficiency in the exercise of the mental powers in every direction; three words will express this great want: *deficiency of judgment.* I do not wish to make any startling assertion, but I know that in physical matters multitudes are ready to draw conclusions who have little or no power of judgment in the cases; that the same is true of other departments of knowledge; and that, generally, mankind is willing to leave the faculties which relate to judgment almost entirely uneducated, and their decisions at the mercy of ignorance, prepossessions, the passions, or even accident.

Do not suppose, because I stand here and speak thus, making no exceptions, that I except myself. I have learned to know that I fall infinitely short of that efficacious exercise of the judgment which may be attained. There are exceptions to my general conclusion, numerous and high; but if we desire to know

how far education is required, we do not consider the few who need it not, but the many who have it not; and in respect of judgment, the number of the latter is almost infinite. I am moreover persuaded that the clear and powerful minds which have realized in some degree the intellectual preparation I am about to refer to, will admit its importance, and, indeed, its necessity; and that they will not except themselves, nor think that I have made my statement too extensive.

ILLUSTRATIONS OF ERRORS OF JUDGMENT.

As I believe that a very large proportion of the errors we make in judgment is a simple and direct result of our perfectly unconscious state, and think that a demonstration of the liabilities we are subject to would aid greatly in providing a remedy, I will proceed first to a few illustrations of a physical nature. Nothing can better supply them than the intimations we derive from our senses; to them we trust directly; by them we become acquainted with external things, and gain the power of increasing and varying facts upon which we entirely depend. Our sense perceptions are wonderful. Even in the observant, but unreflective, infant they soon produce a result which looks like intuition, because of its perfection. Coming to the mind as so many data, they are stored up, and, without being conscious of it, are ever after used in like circumstances in forming our judgment; and it is not wonderful that man is accustomed to trust them without examination. Nevertheless, the result is the effect of education: the mind has to be instructed with regard to the senses and their intimations through every step of life; and where the instruction is imperfect, it is astonishing how soon and how much their evidence fails us. Yet, in the latter years of life, we do not consider this matter, but having obtained the ordinary teaching sufficient for ordinary purposes, we venture to judge of things which are extraordinary for the time, and almost always with the more assurance as our powers of observation are less educated. Consider the following case of a physical impression, derived from the sense of touch, which can be examined and verified at pleasure: If the hands be brought toward each other so that the tips of the corresponding fingers touch, the end of any finger may be considered as an object to be felt by the

opposed finger: thus, the two middle fingers may for the present be so viewed. If the attention be directed to them, no difficulty will be experienced in moving each lightly in a circle round the tip of the other, so that they shall each feel the opposite, and the motion may be either in one direction or the other—looking at the fingers, or with eyes employed elsewhere—or with the remaining fingers touching quiescently, or moving in a like direction; all is easy, because each finger is employed in the ordinary or educated manner while obeying the will, and while communicating through the sentient organ with the brain. But turn the hands half way round, so that their backs shall be toward each other, and then, crossing them at the wrists, again bring the like fingers into contact at the tips. If it be now desired to move the extremities of the middle fingers around each other, or to follow the contour of one finger by the tip of the opposed one, all sorts of confusion in the motion will ensue; and as the finger of one hand tries, under the instruction of the will, to move in one course, the touched finger will convey an intimation that it is moving in another. If all the fingers move at once, all will be in confusion; the ease and simplicity of the first case have entirely disappeared. If, after some considerable trial, familiarity with the new circumstances have removed part of the uncertainty, then, crossing the hands at the opposite sides of the wrists will renew it. These contrary results are dependent, not on any change in the nature of the sentient indication, or of the surfaces or substances which the sense has to deal with, but upon the trifling circumstance of a little variation from the direction in which the sentient organs of these parts are usually exerted, and they show to what an extraordinary extent our interpretations of the sense impressions depend upon the experience; that is, the education which they have previously received, and their great inability to aid us at once in circumstances which are entirely new.

At other times they fail us because we cannot keep a true remembrance of former impressions. Thus, on the evening of March 11th last, I and many others were persuaded that at one period the moon had a real green color, and though I knew that the prevailing red tints of the general sky were competent to

produce an effect of such a kind, yet there was so little of that in the neighborhood of the planet, that I was doubtful whether the green tint was not produced on the moon by some aerial medium spread before it, until, by holding up white cards in a proper position, and comparing them with our satellite, I had determined experimentally that the effect was only one of contrast. In the midst of the surrounding tints my memory could not recall the true sentient impression which the white of the moon most surely had before made upon the eye.

At other times the failure is because one impression is overpowered by another; for as the morning star disappears when the sun is risen, though still above the horizon and shining brightly as ever, so do stronger phenomena obscure weaker, even when both are of the same kind, till an uninstructed person is apt to pass the weaker unobserved, and even deny their existence.

So error results occasionally from believing our senses; it ought to be considered, rather, as an *error of the judgment* than of the sense, for the latter has performed its duty. The indication is always correct, and in harmony with the great truth of nature. Where, then, is the mistake? Almost entirely with our judgment. We have not had that sufficient instruction by the senses which would justify our making a conclusion; we have to contrive extra and special means, by which their first impressions shall be corrected, or rather enlarged; and it is because our procedure was hasty, our data too few, and our judgment untaught, that we fell into mistake; not because the data were wrong. How frequently may each one of us perceive, in our neighbors, at least, that a result like this derived from the observation of physical things, happens in the ordinary affairs of common life.

When I become convicted of such haste, which is not unfrequently the case, I look back upon the error as one of "presumptuous judgment." Under that form it is easily presentable to the mind, and has a useful corrective action. I do not think the expression too strong; for if we are led, either by simplicity or vanity, to give an opinion upon matters respecting which we are not instructed, either by the knowledge of others, or our own intimate observation; if we are induced to ascribe an effect to

one force, or deny its relation to another, knowing little or nothing of the laws of the forces, or the necessary conditions of the effect to be considered; surely our judgment must be qualified as "presumptuous."

There are multitudes who think themselves competent to decide, after the most cursory observation, upon the cause of this or that event (and they may be really very acute and correct in things familiar to them)—a not unusual phrase with them is, that "it stands to reason," that the effect they expect should result from the cause they assign to it, and yet it is *very difficult*, in numerous cases that appear plain, to show this reason, or to deduce the true and only rational relation of cause and effect. In matters connected with natural philosophy, we have wonderful aid in the progress and assurance in the character of our final judgment afforded us by the facts which supply our data, and the experience which multiplies their number and varies their testimony. A fundamental fact, like an elementary principle, never fails us; its evidence is always true; but, on the other hand, we frequently have to ask, what is the fact?—often fail in distinguishing it—often fail in the very statement of it—and mostly overpass or come short of its true recognition.

If we are subject to mistake in the interpretation of our mere sense impressions, we are much more liable to error when we proceed to deduce from these impressions (as supplied to us by our ordinary experience) the relation of cause and effect; and the accuracy of our judgment, consequently, is more endangered. Then our dependence should be upon carefully-observed facts and the laws of nature; and I shall proceed to a further illustration of the mental deficiency I speak of by a brief reference to one of these.

THE LAWS OF NATURE.

The *laws of nature*, as we understand them, are the foundation of our knowledge in natural things. So much as we know of them has been developed by the successive energies of the highest intellects, exerted through many ages. After a most rigid and scrutinizing examination upon principle and trial, a definite expression has been given to them; they have become, as it were, our belief or trust. From day to day we still examine and test

our expressions of them. We have no interest in their retention if erroneous; on the contrary, the greatest discovery a man could make would be to prove that one of these accepted laws was erroneous, and his greatest honor would be the discovery. Neither would there be any desire to retain the former expression; for we know that the new or the amended law would be far more productive in results, would greatly increase our intellectual acquisitions, and would prove an abundant source of fresh delight to the mind.

These laws are numerous, and are more or less comprehensive. They are also precise; for a law may present an apparent exception, and yet not be less a law to us, when the exception is included in the expression. Thus, that elevation of temperature expands all bodies is a well-defined law, though there be an exception in water for a limited temperature; because we are careful, while stating the law, to state the exception and its limits. Pre-eminent among these laws, because of its simplicity, its universality, and its undeviating truth, stands that enunciated by Newton (commonly called the *law of gravitation*), that matter attracts matter with a force inversely as the square of the distance. Newton showed that, by this law, the general condition of things on the surface of the earth is governed; and the globe itself, with all upon it, kept together as a whole. He demonstrated that the motions of the planets round the sun, and of the satellites about the planets, were subject to it. During and since his time, certain variations in the movements of the planets, which were called irregularities, and might for aught that was then known, be due to some cause other than the attraction of gravitation, were found to be its necessary consequences. By the close and scrutinizing attention of minds the most persevering and careful, it was ascertained that even the distant stars were subject to this law; and, at last, to place as it were the seal of assurance to its neverfailing truth, it became, in the minds of Leverrier and Addams (1845), the foreteller and the discoverer of an orb rolling in the depths of space, so large as to equal nearly sixty earths, yet so far away as to be invisible to the unassisted eye. What truth, beneath that of revelation, can have an assurance stronger than this?

Yet this law is often cast aside as of no value or authority, because of the unconscious ignorance amid which we dwell. You hear at the present day, that some persons can place their fingers on a table, and then elevating their hands, the table will rise up and follow them; that the piece of furniture, though heavy, will ascend, and that their hands bear no weight, or are not drawn down to the wood; you do not hear of this as a conjuring maneuver, to be shown for your amusement, but are expected seriously to believe it; and are told that it is an important fact, a great discovery among the truths of nature. Your neighbor, a well-meaning, conscientious person, believes it; and the assertion finds acceptance in every rank of society, and among classes which are esteemed to be educated. Now, what can this imply but that society, speaking generally, is not only ignorant as respects education of the judgment, but is also ignorant of its ignorance? The parties who are thus persuaded, and those who are inclined to think and to hope that they are right, throw up Newton's law at once, and *that* in a case which of all others is fitted to be tested by it; or if the law be erroneous, to test the law. I will not say they oppose the law, though I *have* heard the supposed fact quoted triumphantly against it; but as far as my observation has gone, they will not apply it. The law affords the simplest means of testing the fact; and if there be, indeed, any thing in the latter new to our knowledge (and who shall say that new matter is not presented to us daily, passing away unrecognized), it also affords the means of placing *that* before us separately in its simplicity and truth. Then why not consent to apply the knowledge we have to that which is under development? Shall we educate ourselves in what is known, and then, casting away all we have acquired, turn to our ignorance for aid, to guide us among the unknown? If so, instruct a man to write, but employ one who is unacquainted with letters to read that which is written; the end will be just as unsatisfactory, though not so injurious, for the book of nature, which we have to read, is written by the finger of God. Why should not one who can thus lift a table, proceed to verify and simplify his fact, and bring it into relation with the law of Newton? Why should he not take the top of his table (it may be a

small one), and placing it in a balance, or on a lever, proceed to ascertain how much weight he can raise by the draught of his fingers upward; and of this weight so ascertained, how much is unrepresented by any pull upon the fingers downward? He will then be able to investigate the further question, whether electricity, or any new force of matter, is made manifest in his operations; or whether action and reaction being unequal, he has at his command the source of a perpetual motion. Such a man, furnished with a nicely constructed carriage on a railway, ought to travel by the mere draught of his own fingers. A far less prize than this would gain him the attention of the whole scientific and commercial world; and he may rest assured, that if he can make the most delicate balance incline or decline by attraction, though it be only with the force of an ounce, or even a grain, he will not fail to gain universal respect and most honorable reward.

When we think of the laws of nature (which by continued observation have become known to us) as the proper tests to which any new fact, or our theoretical representation of it, should, in the first place, be subjected, let us contemplate their assured and large character. Let us go out into the field and look at the heavens with their solar, starry, and planetary glories; the sky with its clouds; the waters descending from above, or wandering at our feet; the animals, the trees, the plants, and consider the permanency of their actions and conditions under the government of these laws. The most delicate flower, the tenderest insect, continues in its species through countless years, always varying, yet ever the same. When we think we have discovered a departure, as in the *Aphides*, *Medusæ*, *Distomæ*, etc., the law concerned is itself the best means of instituting an investigation, and hitherto we have always found the witness to return to its original testimony! These frail things are never ceasing, never changing evidence of the law's immutability. It would be well for a man who has an anomalous case before him to contemplate a blade of grass, and when he has considered the numerous ceaseless, yet certain, actions there located, and his inability to change the character of the least among them, to recur to his new subject; and, in place of accept-

ing unwatched and unchecked results, to search for a like certainty and recurrence in the appearances and actions which belong to it.

Perhaps it may be said, the delusion of table-moving is past, and need not be recalled before an audience like the present. Even granting this, let us endeavor to make the subject leave one useful result; let it serve for an example, not to pass into forgetfulness. It is so recent, and was received by the public in a manner so strange, as to justify a reference to it, in proof of the uneducated condition of the general mind. I do not object to table-moving for *itself*, for being once stated it becomes a fit, though a very unpromising, subject for experiment; but I am opposed to the unwillingness of its advocates to investigate; their boldness to assert; the credulity of the lookers on; their desire that the reserved and cautious objector should be in error; and I wish, by calling attention to these things, to make the general want of mental discipline and education manifest.

Having endeavored to point out this great deficiency in the exercise of the intellect, I will offer a few remarks upon the means of subjecting it to the improving processes of instruction. Perhaps many who watch over the interests of the community, and are anxious for its welfare, will conclude that the development of the judgment cannot properly be included in the general idea of education; that as the education proposed must, to a very large degree, be of *self*, it is so far incommunicable; that the master and the scholar merge into one, and both disappear; that the instructor is no wiser than the one to be instructed, and thus the usual relations of the two lose their power. Still I believe that the judgment may be educated to a very large extent, and might refer to the fine arts as giving proof in the affirmative; and though, as respects the community and its improvement in relation to common things, any useful education must be of *self*, I think that society, as a body, must act powerfully in the cause. Or it may still be objected that my experience is imperfect, is chiefly derived from exercise of the mind within the precincts of natural philosophy, and has not that generality of application which can make it of any value to society at large. I can only repeat my conviction that society occupies itself nowadays about

physical matters, and judges them as common things. Failing in relation to them, it is equally liable to carry such failures into other matters of life. The proof of deficient judgment in one department shows the habit of mind, and the general want, in relation to others. I am persuaded that all persons may find in natural things an admirable school for self-instruction, and a field for the necessary mental exercise; that they may easily apply their habits of thought, thus formed, to a social use; and that they ought to do this as a duty to themselves and their generation.

Let me first try to illustrate the former part of the case, and at the same time state what I think a man may and ought to do for himself.

The *self-education* to which he should be stimulated by the desire to improve his judgment requires no blind dependence upon the dogmas of others, but is commended to him by the suggestions and dictates of his own common sense. The first part of it is founded in mental discipline: happily, it requires no unpleasant avowals; appearances are preserved, and vanity remains unhurt; but it is necessary that a man *examine himself*, and *that* not carelessly. On the contrary, as he advances he should become more and more strict till he ultimately prove a sharper critic to himself than any one else can be, and he ought to intend this; for, so far as he consciously falls short of it he acknowledges that others may have reason on their side when they criticise him. A first result of this habit of mind will be an internal conviction of *ignorance in many things respecting which his neighbors are taught*, and that his opinions and conclusions on such matters ought to be advanced with reservation. A mind so disciplined will be *open to correction, upon good grounds, in all things*, even in those it is best acquainted with, and should familiarize itself with the idea of such being the case; for though it sees no reason to suppose itself in error, yet the possibility exists. The mind is not enfeebled by this internal admission, but strengthened; for if it cannot distinguish proportionately between the probable right and wrong of things known imperfectly, it will tend either to be rash or to hesitate; while that which admits the due amount of probability is likely to be justified in the end. It is

right that we should stand by and act on our principles, but not right to hold them in obstinate blindness, or retain them when proved to be erroneous. I remember the time when I believed a spark was produced between voltaic metals as they approached to contact (and the reason why it might be possible yet remains), but others doubted the fact and denied the proofs, and on re-examination I found reason to admit their corrections were well founded. Years ago I believed that electrolytes could conduct electricity by a conduction proper: that has also been denied by many through long time; though I believed myself right, yet circumstances have induced me to pay such respect to criticism as to reinvestigate the subject, and I have the pleasure of thinking that nature confirms my original conclusions. So, though evidence may appear to preponderate extremely in favor of a certain decision, it is wise and proper to hear a counter statement. You can have no idea how often and how much, under such an impression, I have desired that the marvellous descriptions which have reached me might prove, in some points, correct, and how frequently I have submitted myself to hot fires, to friction with magnets, to the passes of hands, etc., lest I should be shutting out discovery; encouraging the strong desire that something might be true, and that I might aid in the development of a new force of nature.

HOW EASY IS SELF-DECEPTION.

Among those points of self-education which take up the form of *mental discipline*, there is one of great importance, and, moreover difficult to deal with, because it involves an internal conflict, and equally touches our vanity and our ease. It consists in the *tendency to deceive ourselves* regarding all we wish for, and the necessity of *resistance to these desires*. It is impossible for any one who has not been constrained, by the course of his occupation and thoughts, to a habit of continual self-correction, to be aware of the amount of error in relation to judgment arising from this tendency. The force of the temptation which urges us to seek for such evidence and appearances as are in favor of our desires, and to disregard those which oppose them, is wonderfully great. In this respect we are all, more or less, active promoters of error. In place of practicing wholesome self-abnega-

tion, we ever make the wish the father to the thought; we receive as friendly that which agrees with, we resist with dislike that which opposes, us; whereas the very reverse is required by every dictate of common sense. Let me illustrate my meaning by a case where the proof being easy, the rejection of it under the temptation is the more striking. In old times a ring or button would be tied by a boy to one end of a long piece of thread, which he would then hold at the other end, letting the button hang within a glass, or even a piece of slate-pencil, or sealing-wax, or a nail; he would wait and observe whether the button swung, and whether in swinging it tapped the glass as many times as the clock struck last, or moved along or across the slate-pencil, or in a circle or oval. In late times parties in all ranks of life have renewed and repeated the boy's experiment. They have sought to ascertain a very simple fact, namely, whether the effect was as reported; but how many were unable to do this? They were sure they could keep their hands immovable—were sure they could do so while watching the result—were sure that accordance of swing with an expected direction was not the result of their desires or involuntary motions. How easily all these points could be put to the proof by *not looking at the objects*, yet how difficult for the experimenter to deny himself that privilege. I have rarely found one who would freely permit the substance experimented with to be screened from his sight, and then its position changed.

TABLE-TIPPING TESTED BY SCIENCE.

When engaged in the investigation of table-turning I constructed a very simple apparatus, serving as an index, to show the unconscious motions of the hands upon the table. The results were either that the index moved before the table, or that neither index nor table moved; and in numerous cases all moving power was annihilated. A universal objection was made to it by the table-turners. It was said to paralyze the powers of the mind; but the experimenters need not see the index. They may leave their friends to watch that, and their minds may revel in any power that their expectation or their imagination can confer. So restrained, a *dislike* to the trial arises; but what is that, except a proof that while they trust themselves they

doubt themselves, and are not willing to proceed to the decision, lest the trust which they like should fail them, and the doubt which they dislike rise to the authority of truth?

Again, in respect of the action of magnets on the body, it is almost impossible for an uninstructed person to enter profitably upon such an inquiry. He may observe *any* symptom which his expectation has been accidentally directed to, yet be unconscious of any, if unaware of his subjection to the magnetic force, or the conditions and manner of its application.

As a proof of the extent of this influence, even on the minds of those well aware of its force, and desirous under every circumstance to escape from it, I will mention the practice of the chemist, who, dealing with the balance, that impartial decider which never fails in its indication, but offers its evidence with all simplicity, durability, and truth, still remembers he should doubt himself; and with the desire of rendering himself inaccessible to temptation, takes a counterpoised but unknown quantity of the substance for analysis, that he may remain ignorant of the proportions which he ought to obtain, and only at last compares the sum of his products with his counterpoise.

The *inclination* we exhibit in respect of any report or opinion that harmonizes with our preconceived notions, can only be compared in degree with the *incredulity* we entertain toward every thing that opposes them, and these opposite and apparently incompatible, or at least inconsistent, conditions are accepted simultaneously in the most extraordinary manner. At one moment a departure from the laws of nature is admitted without pretence of a careful examination of the proof; and at the next, the whole force of these laws acting undeviatingly through all time is denied, because the testimony they give is disliked.

It is my firm persuasion that no man can examine himself in the most common things having any reference to him personally, or to any person, thought, or matter related to him, without being soon made aware of *the temptation*, and the difficulty of opposing it. I could give you many illustrations personal to myself about atmospheric magnetism, lines of force, attraction, repulsion, unity of power, nature of matter, etc., or in things more general to our common nature about likes and dislikes, wishes, hopes,

and fears; but it would be unsuitable, and also unnecessary, for each must be conscious of a large field sadly uncultivated in this respect. *I will simply express my strong belief that that point of self-education which consists in teaching the mind to resist its desires and inclinations, until they are proved to be right, is the most important of all, not only in things of natural philosophy but in every department of daily life.*

There are numerous precepts, resulting more or less from the principles of mental discipline already insisted on as essential, which are very useful in forming a judgment about matters of fact, whether among natural things or between man and man. Such a precept, and one that should recur to the mind early in every new case, is to *know the conditions* of the matter respecting which we are called upon to make a judgment. To suppose that any would judge before they professed to know the conditions would seem to be absurd; on the other hand, to assume that the community *does wait* to know the conditions before it judges, is an assumption so large that I cannot accept it. Very few search out the conditions; most are anxious to sink those which oppose their preconceptions; yet none can be left out if a right judgment is to be formed. It is true that many conditions must ever remain unknown to us, even in regard to the simplest things in nature; thus, as to the wonderful action of gravity, whose law never fails us, we cannot say whether the bodies are acting truly at a distance or by a physical line of force as a connecting link between them. The great majority think the former is the case; Newton's judgment is for the latter. But of the conditions which are within our reach we should search out all; for in relation to those which remain unknown or unsuspected, we are in that very ignorance (regarding judgment) which it is our present object first to make manifest and then to remove.

One exercise of the mind, which largely influences the power and character of the judgment, is the habit of forming *clear and precise ideas*. If, after considering a subject in our ordinary manner, we return upon it with the special purpose of noticing the condition of our thoughts, we shall be astonished to find how little precise they remain. On recalling the phenomena relating to a matter of fact, the circumstances modifying them,

the kind and amount of action presented, the real or probable result, we shall find that the first impressions are scarcely fit for the foundation of a judgment, and that the second thoughts will be best. For the acquirement of a good condition of mind in this respect, the thoughts should be trained to a habit of clear and precise formation, so that vivid and distinct impressions of the matter in hand, its circumstances and consequences, may remain.

Before we proceed to consider any questions involving physical principles, we should set out with *clear ideas* of the naturally possible and impossible. There are many subjects uniting more or less of the most sure and valuable investigations of science with the most imaginary and unprofitable speculation, that are continually passing through their various phases of intellectual, experimental, or commercial development, some to be established, some to disappear, and some to recur again and again, like ill weeds that cannot be extirpated, yet can be cultivated to no result as wholesome food for the mind. Such, for instance, in different degrees, are the caloric engine, the electric light, the Pasilalinic sympathetic compass,* mesmerism, homœopathy, odylism, the magneto-electric engine, the perpetual motion, etc. All hear and talk of these things; all use their judgment more or less upon them, and all might do that effectively, if they were to instruct themselves to the extent which is within their reach. I am persuaded that natural things offer an admirable school for self-instruction, a most varied field for the necessary mental practice, and that those who exercise themselves therein may easily apply the habits of thought thus formed to a social use. As a first step in such practice, clear ideas should be obtained of what is possible and what is impossible. Thus, it is impossible to *create* force. We may employ it; we may evoke it in one form by its consumption in another; we may hide it for a period; but we can neither *create* nor *destroy* it. We may cast it away; but where we dismiss it, there it will do its work. If, therefore, we desire to consider a proposition respecting the employment or evolution of power, let us carry our judgment, educated on this point, with us. If the proposal include the double use of a force

* See *Chamber's Journal*, 1851, Feb. 15th, p. 105.

with only one excitement, it implies a creation of power, and that *cannot be.* If we could by the fingers draw a heavy piece of wood or stone upward without effort, and then, letting it sink, could produce by its gravity an effort equal to its weight, that would be a creation of power, and *cannot be.*

So, again, we cannot *annihilate* matter, nor can we *create* it. But if we are satisfied to rest upon that dogma, what are we to think of table-lifting? If we could make the table to cease from acting by gravity upon the earth beneath it, or by reaction upon the hand supposed to draw it upward, we *should annihilate it*, in respect of that very property which characterizes it as matter.

Considerations of this nature are very important aids to the judgment; and when a statement is made claiming our assent, we should endeavor to reduce it to some consequence which can be immediately compared with, and tried by, these or like compact and never-failing truths. If incompatibility appears, then we have reason to suspend our conclusion, however attractive to the imagination the proposition may be, and pursue the inquiry further, until accordance is obtained; it must be a most uneducated and presumptuous mind that can at once consent to cast off the tried truth and accept in its place the mere loud assertion. We should endeavor to separate the points before us, and concentrate each, so as to evolve a clear type-idea of the ruling fact and its consequences; looking at the matter on every side, with the great purpose of distinguishing the constituent reality, and recognizing it under every variety of aspect.

In like manner we should accustom ourselves to clear and definite language, especially in physical matters giving to a word its true and full, but measured meaning, that we may be able to convey our ideas clearly to the minds of others. Two persons cannot mutually impart their knowledge or compare and rectify their conclusions unless both attend to the true intent and force of language. If by such words as attraction, electricity, polarity, or atom, they imply different things, they may discuss facts, deny results, and doubt consequences for an indefinite time without any advantageous progress. I hold it as a great point in self-education, that the student should be continually engaged in forming exact ideas and in expressing them clearly by language.

Such practice insensibly opposes any tendency to exaggeration or mistake and increases the sense and love of truth in every part of life.

I should be sorry, however, if what I have said were understood as meaning that education for the improvement and strengthening of the judgment is to be altogether repressive of the imagination, or confine the exercise of the mind to processes of a mathematical or mechanical character. I believe that, in the pursuit of physical science, the imagination should be taught to present the subject investigated in all possible, and even in impossible views; to search for analogies of likeness and (if I may say so) of opposition—inverse or contrasted analogies; to present the fundamental idea in every form, proportion, and condition; to clothe it with suppositions and probabilities, that all cases may pass in review, and be touched, if needful, by the Ithuriel spear of experiment. But all this must be *under government*, and the result must not be given to society until the judgment, educated by the process itself, has been exercised upon it. Let us construct our hypotheses for an hour, or a day, or for years; they are of the utmost value in the elimination of truth, "which is evolved more freely from error than from confusion;" but, above all things, let us not cease to be aware of the temptation they offer, or because they gradually become familiar to us, accept them as established. We could not reason about electricity without thinking of it as a fluid, or a vibration, or some other existent state or form. We should give up half our advantage in the consideration of heat if we refused to consider it as a principle or a state of motion. We could scarcely touch such subjects by experiment, and we should make no progress in their practical application without hypotheses; still it is absolutely necessary that we should learn to doubt the conditions we assume, and acknowledge we are uncertain, whether heat and electricity are vibrations or substances, or either.

When the different data required are in our possession, and we have succeeded in forming a clear idea of each, the mind should be instructed to *balance them* one against another, and not suffered carelessly to hasten to a conclusion. This reserve is most essential; and it is especially needful that the reasons which are

adverse to our expections or our desires should be carefully attended to. We often receive truth from unpleasant sources; we often have reason to accept unpalatable truths. We are never freely willing to admit information having this unpleasant character, and it requires much self-control in this respect, to preserve us, even in a moderate degree, from errors. I suppose there is scarcely one investigator in original research who has not felt the temptation to disregard the reasons and results which are against his views. I acknowledge that I have experienced it very often, and will not pretend to say that I have yet learned on all occasions to avoid the error. When a bar of bismuth or phosphorus is placed between the poles of a powerful magnet, it is drawn into a position across the line joining the poles; when only one pole is near the bar, the latter recedes; this and the former effect is due to repulsion, and is strikingly in contrast with the attraction shown by iron. To account for it, I at one time suggested the idea that a polarity was induced in the phosphorus or bismuth, the reverse of the polarity induced in iron, and that opinion is still sustained by eminent philosophers. But observe a necessary result of such a supposition, which appears to follow when the phenomena are referred to elementary principles. *Time* is shown, by every result bearing on this subject, to be concerned in the coming on and passing away of the inductive condition produced by magnetic force; and the consequence, as Thomson pointed out, is, that if a ball of bismuth could be suspended between the poles of a magnet, so as to encounter no resistance from the surrounding medium, or from friction or torsion, and were once put in motion round a vertical axis, it would, because of the assumed polar state, go on forever revolving, the parts which are at any moment axial moving like the bar, so as to become the next moment equatorial. Now, as we believe the mechanical forces of nature tend to bring things into a stable, and not into and unstable condition; as we believe that a perpetual motion is impossible; so, because both these points are involved in the notion of the reverse polarity, which itself is not supposed to be dependent on any consumption of power, I feel bound to hold the judgment balanced, and therefore hesitate to accept a conclusion founded

on such a notion of the physical action; the more especially as the peculiar test facts* which prove the polarity of iron are not reproduced in the case of diamagnetic bodies.

As a result of this wholesome mental condition we should be able to form a *proportionate judgment.* The mind naturally desires to settle upon one thing or another; to rest upon an affirmative or a negative; and that with a degree of absolutism which is irrational and improper. In drawing a conclusion, it is very difficult, but not the less necessary, to make it *proportionate* to the evidence; except where certainty exists (a case of rare occurrence) we should consider our decisions as probable only. The probability may appear very great, so that in affairs of the world we often accept such as certainty, and trust our welfare or our lives upon it. Still, only an uneducated mind will confound probability with certainty, especially when it encounters a contrary conclusion drawn by another from like data. This suspension in degree of judgment will not make a man less active in life, or his conclusions less certain as truths; on the contrary, I believe him to be the more ready for the right amount and direction of action on any emergency; and am sure his conclusions and statements will carry more weight in the world than those of the incautious man.

When I was young, I received from one well able to aid a learner in his endeavors toward self-improvement, a curious lesson in the mode of estimating the amount of belief one might be induced to attach to our conclusions. The person was Dr. Wollaston, who, upon a given point, was induced to offer me a wager of two to one on the affirmative. I rather impertinently quoted Butler's well-known lines† about the kind of persons who use wagers for argument, and he gently explained to me, that he considered such a wager not as a thoughtless thing, but as an expression of the amount of belief in the mind of the person offering it; combining this curious application of the wager, as a *meter*, with the necessity that ever existed of drawing conclusions, not absolute, but proportionate to the evidence.

* "Experimental Researches in Electricity," paragraphs 2,657–2,681.

† Quoth she, "I've heard old cunning stagers
Say fools for arguments use wagers."

RESERVING JUDGMENT.

Occasionally and frequently the exercise of the judgment ought to end in *absolute reservation.* It may be very distasteful, and great fatigue, to suspend a conclusion; but as we are not infallible, so we ought to be cautious; we shall eventually find our advantage, for the man who rests in his position is not so far from right as he who, proceeding in a wrong direction, is ever increasing his distance. In the year 1824, Arago discovered that copper and other bodies placed in the vicinity of a magnet, and having no direct action of attraction or repulsion upon it, did affect it when moved, and were affected by it. A copper plate revolving near a magnet carried the magnet with it; or if the magnet revolved, and not the copper, it carried the copper with it. A magnetic needle vibrating freely over a disc of glass or wood, was exceedingly retarded in its motion when these were replaced by a disc of copper. Arago stated most clearly all the conditions, and resolved the forces into three directions, but not perceiving the physical cause of the action, exercised a most wise and instructive reservation as to his conclusion. Others, as Haldat, considered it as the proof of the universality of a magnetism of the ordinary kind, and held to that notion, though it was contradicted by the further facts; and it was only at a future period that the true physical cause, namely, magneto-electric currents induced in the copper, became known to us. What an education Arago's mind must have received in relation to philosophical reservation; what an antithesis he forms with the mass of table-turners; and what a fine example he has left us of that condition of judgment to which we should strive to attain!

If I may give another illustration of the needful reservation of judgment, I will quote the case of oxygen and hydrogen gases which, being mixed, will remain together uncombined for years in contact with glass, but in contact with spongy platinum combine at once. We have the same fact in many forms, and many suggestions have been made as to the mode of action, but as yet we do not know *clearly* how the result comes to pass. We cannot tell whether electricity acts or not. Then we should suspend our conclusions. Our knowledge of the fact itself, and the many

varieties of it, is not the less abundant or sure; and when the truth shall hereafter emerge from the mist, we ought to have no opposing prejudice, but be prepared to receive it.

The education which I advocate will require *patience* and *labor of thought* in every exercise tending to improve the judgment. It matters not on what subject a person's mind is occupied; he should engage in it with the conviction that it will require mental labor. A powerful mind will be able to draw a conclusion more readily and more correctly than one of moderate character, but both will surpass themselves if they make an earnest, careful investigation, instead of a careless or prejudiced one; an education for this purpose is the more necessary for the latter, because the man of less ability may, through it, raise his rank and amend his position. I earnestly urge this point of self-education; for I believe it to be more or less in the power of every man greatly to improve his judgment. I do not think that one has the complete capacity for judgment which another is naturally without. I am of opinion that all may judge, and that we only need to declare on every side the conviction that mental education is wanting, and lead men to see that through it they hold, in a large degree, their welfare and their character in their own hands to cause in future years an abundant development of right judgment in every class.

This education has for its first and its last step *humility*. It can commence only because of a conviction of deficiency; and if we are not disheartened under the growing revelations which it will make, that conviction will become stronger unto the end. But the humility will be founded, not on comparison of ourselves with the imperfect standards around us, but on the increase of that internal knowledge which alone can make us aware of our internal wants. The first step in correction is to learn our deficiencies, and, having learned them, the next step is almost complete; for no man who has discovered that his judgment is hasty or illogical or imperfect would go on with the same degree of haste or irrationality or presumption as before. I do not mean that all would at once be cured of bad mental habits, but I think better of human nature than to believe that a man, in any rank of life, who has arrived at the consciousness of such a condition

would deny his common sense and still judge and act as before. And though such self-schooling must continue to the end of life to supply an experience of deficiency rather than of attainment, still there is abundant stimulus to excite any man to perseverance. What he has lost are things imaginary, not real; what he gains are riches before unknown to him, yet invaluable; and though he may think more humbly of his own character, he will find himself at every step of his progress more sought for than before, more trusted with responsibility and held in pre-eminence by his equals, and more highly valued by those whom he himself will esteem worthy of approbation.

And now a few words upon the mutual relation of two classes, namely, *those* who decline to educate their judgments in regard to the matters on which they decide, and those who, by self-education, have endeavored to improve themselves; and upon the remarkable and somewhat unreasonable manner in which the latter are called upon and occasionally taunted by the former. A man who makes assertions or draws conclusions regarding any given case ought to be competent to investigate it. He has no right to throw the *onus* on others, declaring it their duty to prove him right or wrong. His duty is to demonstrate the truth of that which he asserts, or to cease from asserting. The men he calls upon to consider and judge have enough to do with themselves in the examination, correction, or verification of their own views. The world little knows how many of the thoughts and theories which have passed through the mind of a scientific investigator have been crushed in silence and secrecy by his own severe criticism and adverse examination; that in the most successful instances not a tenth of the suggestions, the hopes, the wishes, the preliminary conclusions have been realized. And is a man so occupied to be taken from his search after truth in the path he hopes may lead to its attainment and occupied in vain upon nothing but a broad assertion?

Neither has the assertor of any new thing a right to claim an answer in the form of *Yes* or *No;* or think, because none is forthcoming, that he is to be considered as having established his assertion. So much is unknown to the wisest man, that he may often be without an answer, as frequently he is so, because the subject

is in the region of hypothesis, and not of facts. In either case he has the right to refuse to speak. I cannot tell whether there are two fluids of electricity or any fluid at all. I am not bound to explain how a table tilts any more than to indicate how, under the conjuror's hands, a pudding appears in a hat. The means are not known to me. I am persuaded that the results, however strange they may appear, are in accordance with that which is truly known, and if carefully investigated, would justify the well-tried laws of nature; but, as life is limited, I am not disposed to occupy the time it is made of in the investigation of matters which, in what is known to me of them, offer no reasonable prospect of any useful progress, or any thing but negative results. We deny the right of those who call upon us to answer their speculations "*if we can*," while we have so many of our own to develop and correct; and claim the right for ourselves of withholding either our conclusions or the reasons for them, without in the least degree admitting that their affirmations are unanswerable. We are not even called upon to give an answer to the best of our belief, nor bound to admit a bold assertion because we do not *know* to the contrary. No one is justified in claiming our assent to the spontaneous generation of insects, because we cannot circumstantially explain how a mite or the egg of a mite has entered into a particular bottle. Let those who affirm the exception to the general law of nature, or those others who, upon the affirmation accept the result, work out the experimental proof. It has been done in this case by Schulze, and is in the negative; but how few among the many who make, or repeat, the assertion, would have the requisite self-abnegation, the subjected judgment, the perseverance, and the precision which has been displayed in that research?

When men, more or less marked by their advance, are led by circumstances to give an opinion adverse to any popular notion, or to the assertions of any sanguine inventor, nothing is more usual than the attempt to neutralize the force of such an opinion by reference to the mistakes which like educated men have made; and their occasional misjudgments and erroneous conclusions are quoted, as if they were less competent than others to give an opinion, being even disabled from judging like matters to those

which are included in their pursuits by the very exercise of their minds upon them. How frequently has the reported judgment of Davy, upon the impossibility of gas-lighting on a large scale, been quoted by speculators engaged in tempting moneyed men into companies, or in the pages of journals occupied with the popular fancies of the day, as if an argument were derivable from that in favor of some special object to be commended. Why should not men taught in the matter of judgment far beyond their neighbors be expected to err sometimes, since the very education in which they are advanced can only terminate with their lives? What is there about them, derived from *this education*, which sets up the shadow of a pretence to perfection? Such men cannot learn all things, and may often be ignorant. The very progress which science makes among them as a body is a continual correction of ignorance—that is, of a state which is ignorance in relation to the future, though wisdom and knowledge in relation to the past. In 1823 Wollaston discovered that beautiful substance which he called Titanium, believing it to be a simple metal; and it was so accepted by all philosophers. Yet this was a mistake, for Wöhler, in 1850, showed the substance was a very compound body. This is no reproach to Wollaston or to those who trusted in him; he made a step in metallurgy which advanced knowledge, and perhaps we may hereafter, through it, learn to know that metals are compound bodies. Who, then, has a right to quote his mistake as a reproach against him? Who could correct him but men intellectually educated as he himself was? Who does not feel that the investigation remains a bright gem in the circlet that memory offers to his honor?

If we are to estimate the utility of an educated judgment, do not let us hear merely of the errors of scientific men, which have been corrected by others taught in the same careful school; but let us see what, as a body, they have produced, compared with that supplied by their reproachers.

SCIENCE *versus* TABLE-TURNERS.

Where are the established truths and triumphs of ring-swingers, table-turners, table-speakers? What one result in the numerous divisions of science or its applications can be traced

to their exertions? Where is the investigation completed, so that, as in gas-lighting, all may admit that the principles are established and a good end obtained, without the shadow of a doubt?

If we look to electricity, it, in the hands of the careful investigator, has advanced to the most extraordinary results; it approaches at the motion of his hand; bursts from the metal; descends from the atmosphere; surrounds the globe; it talks, it writes, it records, it appears to him (cautious as he has learned to become) as a universal spirit in nature. If we look to photography, whose origin is of our own day, and see what it has become in the hands of its discoverers and their successors, how wonderful are the results! The light is made to yield impressions upon the dead silver or the coarse paper, beautiful as those it produced upon the living and sentient retina; its most transient impression is rendered durable for years; it is made to leave a visible or an invisible trace; to give a result to be seen now or a year hence; made to paint all natural forms and even colors; it serves the offices of war, of peace, of art, of science, and economy; it replaces even the mind of the human being in some of its lower services; for a little camphine lamp is set down and left to itself, to perform the duty of watching the changes of magnetism, heat, and other forces of nature, and to record the results, in pictorial curves, which supply an enduring record of their most transitory actions.

What has clairvoyance, or mesmerism, or table-rapping done in comparison with results like these? What have the snails at Paris told us from the snails at New York? What have any of these intelligences done in *aiding* such developments? Why did they not inform us of the possibility of photography; or, when that became known, why did they not favor us with some instructions for its improvement? They all profess to deal with agencies far more exalted in character than an electric current or a ray of light; they also deal with mechanical forces; they employ both the bodily organs and the mental; they profess to lift a table, to turn a hat, to see into a box or into the next room, or a town—why should they not move a balance, and so give us the element of a new mechanical power? Take

cognizance of a bottle and its contents, and tell us how they will act upon those of a neighboring bottle? Either see or feel into a crystal, and inform us of what it is composed? Why have they not added one metal to the fifty known to mankind, or one planet to the number daily increasing under the observant eye of the astronomer? Why have they not corrected one of the *mistakes* of the philosophers? There are no doubt very many that require it. There has been plenty of time for the development and maturation of some of the numerous public pretences that have risen up in connection with these supposed agencies; how is it that not one new power has been added to the means of investigation employed by the philosophers or one valuable utilitarian application present to society? . . .

[The conclusion of the lecture, which was chiefly personal and local, is omitted.]

AN AGNOSTIC.

A jelly-fish swam in a tropical sea,
And he said: "This world, it consists of ME;
There's nothing above and nothing below
That a jelly-fish ever can possibly know,
Since the highest reach we can boast of, sight,
Is only the vaguest sense of light;
And we've got, for the *final test* of things,
To trust to the news which one feeling brings.
Now, all that I learn from the sense of touch
Is the fact of my feelings, viewed as such;
But to think these have an external cause
Is an inference clear against logical laws.
Again, to suppose, as I've hitherto done,
There are other jelly-fish under the sun,
Is a poor assumption that can't be backed
By a jot of truth or a single fact;
In short, like *Fichte*, I very much doubt
If there's any thing else at all without;
And so I've come to the plain conclusion,
If the question be only set free from confusion,
That the universe centres solely in me,
And if I were not, then nothing would be."
Just then a shark, who was passing by,
Gobbled him up in the twink of an eye,
And he died with a few convulsive twists,
But, somehow—the universe still exists.—*Grant Allen.*

VIEWS OF SOME SCIENTIFIC MEN.

THE American Institute for the Advancement of Science assembled in Philadelphia on the 4th of September. The *Times* of that city had a number of the members interviewed, and we reproduce what some of them are reported to have said:

Professor N. H. Winchill, State Geologist of Minnesota and presiding officer of the geological and geographical section of the American Association for the Advancement of Science, said: "There is no necessary interference between science and revealed religion. The literal interpretation of the Mosaic account of creation has been modified, yet the developments of geology confirm the essential correctness of Moses. The great body of scientists are neither infidels nor atheists. Religion itself is only a phase of science, involving a study of the attributes of man. No one can disbelieve that man has a religious element and if a scientist disregards this he ignores one of the facts of human existence."

Professor C. H. Hitchcock, State Geologist of New Hampshire, said: "I am a man of strong orthodox convictions, and I find no difficulty in reconciling theology and science. There is nothing in science that undermines religion. The Mosaic account of creation corresponds in outline with the teachings of geology and is easily accepted by the geologist. Of course the ecclesiastics must give us plenty of time as regards creation or we shall rebel. There are skeptical scientists, but I think the skepticism is in the men rather than in their studies. Such men fulfil the prophecy of Peter as to the time when disbelievers in miracles should abound. We are now in the midst of that time."

Professor W. P. Trowbridge, of the chair of dynamic engineering in Columbia College, New York, said: "When Darwin's deliverances as to the origin of species and evolution first appeared it was impossible not to see that they contained much of truth, and young enthusiasts began to draw extreme conclusions and

to connect evolution with spiritual truths. They concluded that as nature is governed by unvarying laws, prayer is useless. A reaction, however, has set in, as powerful as the original impulse, and is sure to be extended. It is seen that spiritual laws do not depend upon physical laws. The two are not commensurate. I think that the most profound scientists are now thoroughly religious, believing in God and revelation."

Professor C. O. Thompson, of Rose Polytechnic School, Terre Haute, Ind., said: "I do not think that the study of science, from a thoroughly scholarly point of view, tends to a disbelief in revealed religion, though the study of individual sciences, without regard to learning, as a whole does tend in that direction."

Professor S. C. Chandler, Jr., of Harvard College, who has read several papers before the mathematical and astronomical section, negatived the idea that the study of science tends to skepticism. "Scientific men," he continued, "have a reverent feeling for religion, coupled with freedom from dogmatic prejudice. Such freedom is not inconsistent with the positive conviction that there must be an intelligent first cause for the visible universe. I am out of patience with the discussions as to the conflict between science and revealed religion."

Professor George Maclaskie, of Princeton College, who belongs to the biological section, does not regard the study of science as inimical to religious faith. "Sometimes, indeed," said he, "religious people, by taking exception to scientific work, discourage Christian young men in the study of science. I am orthodox in my religious belief and I find no difficulty in making science and revelation agree. Some scientific men harm science by foolish attacks on religion, and the reverse is also true. I know from personal observation that the great majority of scientific workers in America are religious men."

When Rev. W. H. Dallinger, F.R.S., F.L.S., of England, was approached, he at first hesitated to express an opinion on so wide a subject at short notice, but presently launched forth as follows: "This question is a settled one. I think modern science, in the light of the Darwinian hypotheses, properly interpreted, conserves theism. I think that this is the view of a large number of scientific teachers in Europe, and particularly in

England. As to the relation between science and the Bible, there can be no question that all who have carefully studied the Old Testament must feel that there are points to be surrendered in the *human interpretations* placed upon the old records. But in considering the fact that geology is constantly pushing its researches further down, any attempt at present reconciliation is unwise and unjustified. The geology of forty years ago had not pushed any great form of life to anything like the point downwards in the series which we have now reached. Hugh Miller reconciled, as he thought, the geology of his time with Genesis, but all the principal factors upon which this reconciliation was effected have been made to shift their position and new factors have been introduced. Hence Hugh Miller's reconciliation is now worse than useless. So of all attempts at reconciliation in the present imperfect state of geological knowledge. Hence discrepencies between Genesis and geology need not disturb the believer. So in relation to biology, the origin of life is demonstratably, in the present state of knowledge, an interposition in the evolutional movement of creation. If one interference why not more? Why not a moral interposition? The Darwinian hypothesis can be as well accepted by the broad-minded Christian as the divine method of creation and even better than by the so-called creation by fiat. It is quite certain that physicists and biologists alike are agreed that no mechanical or chemical movement of atoms can result in the production of consciousness, and whilst consciousness exists, coupled inevitably as it is with moral sense, the probability of a divine interposition for the upward development of man's moral nature is one of the highest probabilities."

Professor W. C. Atwater, of Wesleyan University, Middletown, Conn., said: "The decided tendency of scientific investigation at present and in the present condition of human thought, is apparently against religious belief and certainly opposed to many forms of dogma. I find among young men of my acquaintance who devote themselves to philosophical study, whether physical or physiological, men reared under strong religious influences and imbued with a religious spirit, a tendency to discard many special points of belief which they imbibed in childhood. Indeed, I find very few who hold to orthodoxy in

its entirety. On the other hand, I find in many of these men, and especially in those who are at the same time intellectually strong and morally earnest, an unwillingness to give up their religion as a whole. They say the Apostles' Creed with much devotion of spirit and their belief in the fundamental and deeper doctrines of religion is still strong. My belief is that the skepticism of these earnest spirits is good, for it tends not to the destruction of the ship of faith, but rather to clear its hull of barnacles of belief that they may sail the truer and swifter. Huxley, Tyndall & Co. seem to think themselves triumphant in their attacks upon religion, but they have done no serious harm and some good. I find that such is the feeling, not only among scientific men in America, but among many acquaintances in Germany, Italy, Switzerland, and France. Strictly orthodox scientists are scarce, but the irreverent and scoffers are quite as hard to find."

But there was one person who took a very remarkable view of the state of affairs. The report from which we are quoting says: "I emphatically do believe that the study of science tends to upset belief in orthodoxy," laughed Dr. H. W. Wylie, Chemist of the Agricultural Department at Washington, as he left the room of the chemical section with half a dozen brother scientists. "And you may say, too, that most scientific men are of the same opinion, though they hold their tongues from policy. Of course you college professors have to keep quiet," he continued, turning to a brother chemist, "but I'm in the Government's service and I can afford to speak out."

If this report be correct, Dr. Wylie must have such an opinion of a large number of his brother scientists as makes us wonder that he can at all associate with them, if he wishes to be a gentleman. Do not his words imply that those who had expressed an opinion not in accordance with his are, in plain English, liars? "Most scientific men are" hypocrites, "who hold their tongues from policy"! What a charge! And coming from a scientific man! A man must be "in the Government's service," "to afford to speak out"! Well, this *is* a wonderful country!

MONTHLY MEETINGS.

BY THE SECRETARY.

REGULAR meetings of the Institute are held at its rooms, 4 Winthrop Place, on the first Thursday of every month from October to June inclusive.

The first meeting of this season was on October 2d, and was well attended. The devotional exercises were conducted by Rev. Edward P. Thwing, of Brooklyn. The paper of the evening was by Dr. Charles S. Stockton, whose subject was "Great Believers." The speaker's object was to show that the great leaders of thought and progress in all ages, and in our own especially, so far from being skeptics, were firm believers in a Supreme Being who has created and guides all beings and all things. The subject was, as usual, discussed by members present.

The second meeting of the season, held November 6th, was opened with reading of Scripture and prayer by Prof. H. M. McCracken, of the University of New York. A large gathering greeted Prof. Thwing, of Brooklyn, President of the Academy of Anthropology in New York. His subject was, "The Involuntary Life in its Religious Bearings; or, The Biblical Trance Interpreted in the Light of Modern Science." Although the discussion of this subject is often considered as tending towards spiritism, Prof. Thwing claimed that the phenomena demand careful and prayerful investigation from the friends of Christian Philosophy. Hon. A. B. Conger, Mr. H. S. Wilder, Rev. Dr. Bissell, and others joined in the discussion.

It was announced that the next meeting would be addressed by Prof. Edward J. Hamilton, of Hamilton College, Clinton, N. Y.

The following are names of persons who have become members since April 29th:

Ram Chandra Bose, Lucknow, India; Mrs. M. E. Buckingham, Colorado; Rev. Dr. H. W. Bolton, Boston; Rev. John Q. Adams, San Francisco; Rev. Dr. A. P. Bissell, New York; Rev F. H. Marling, New York; Mrs. E. L. Linnard, Philadelphia; Mrs.

Edward Batchelor, Philadelphia; Rev. Dr. W. F. Paddock, Philadelphia; Mrs. Wm. S. Taylor, Brooklyn; Dr. Wm. W. Wythe, Ocean Grove; Mrs. J. P. Spence, Cincinnati; Mrs. Mary Drear, Philadelphia; Mrs. Harriet Dodge, New York; Rev. Dr. T. J. Dodd, Nashville; Prof. S. S. Orris, Princeton; John H. Burroughs, Philadelphia; Wm. J. Chambers, Philadelphia; Prof. Wm. R. Harper, Morgan Park, Ill.; Rev. Dr. L. Hurlbut, Plainfield, N. J.; Rev. Dr. F. G. Hibbard, Clifton Springs; Prof. A. T. Schauffler, New York; Rev. Dr. A. P. Ripley, Buffalo; Rev. E. H. Pearce, Danville, Ky.; Rev. Morris Evans, Millersburg, Ky.; Prof. J. C. C. Newton, Millersburg, Ky.; Mrs. S. C. Trueheart, Stanford, Ky.; President James R. Inch, LL.D., Sackville, N. B.; Prof. J. H. Wheeler, University of Va.; Rev. G. R. Pike, Elbridge, N. Y.; Miss Phœbe T. Magie, New York; Rev. Dr. Byron Sunderland, Washington; Mrs. A. M. Proudfit, New York; Rev. Dr. Stuart Mitchell, Bloomsburg, Pa.; Prof. Herrick Johnson, D.D., Chicago; Rev. Dr. C. C. Tiffany, New York; Rt. Rev. Bishop S. S. Harris, Detroit; Mrs. Elizabeth Van Antwerp, New York; Nathaniel A. Boynton, New York; Mrs. Ellen E. Rapelye, Mobile; Ammi K. Goodier, Richfield Springs; Mrs. Wm. E. Bunker, New York; Mrs. A. G. Darwin, Bloomfield, N. J.; Rev. A. R. Cocke, Austin, Texas; Rev. Dr. O. H. Tiffany, New York; William Baldwin, New York; Rev. H. G. Henderson, Newport, Ky.; Rev. Albert G. Wardlaw, Culpeper, Va.; Rev. Jacob Freshman, New York; Thomas Douglass, New York; Dr. C. S. Stockton, Newark; President G. H. Whitney, D.D., Hackettstown, N. J.; Laban Dennis, M.D., Newark; Rev. Dr. Daniel Curry, New York; Rev. Dr. Marvin R. Vincent, New York; Prof. H. M. McCracken, University of the City of New York.

DR. CURRY: "Science has very much to *learn* before it can speak with assurance, and theology has very much to *unlearn* before it will be either reasonable or scriptural. It is encouraging to know that both these parties are busily occupied with their lessons. It will be well for them to stick closely to these, and to abstain, as far as possible, from warring words toward each other. All truths are essentially harmonious, but half-truths are always productive of discords."

ABOUT BOOKS.

[In this department we shall make mention of recent publications, especially those in the line of our studies. There will not be space for extended review. The name of the book, its publisher, and its price when know, together with a brief statement of its drift will probably meet the demands of our readers.]

"THE DESTINY OF MAN, VIEWED IN THE LIGHT OF HIS ORIGIN," is the ambitious title of a small book, by Mr. John Fiske, consisting of short chapters most of which are dreams expressed in current scientific language. The cool assumptions of the book are its most conspicuous characteristic. Occasionally the author talks omnisciently, as in such a passage as this: "If the physiological annals of that long and weary time could now be unrolled before us, the principal facts which we should discern," etc. If the book be read as a satire on a certain school of scientists, it will be very enjoyable for the fun it will afford. But the author closes his book with a Christian tone. Houghton, Mifflin & Co. $1.

"THE OUTERMOST RIM AND BEYOND," by Charles Van Norden, is a stimulating book, containing much good thought in ornate language. It is really what its author intended—a contribution toward reverential thought on divine things. Its subtitle is, "A Contribution toward Patience, Reverence, Silence, and Spirituality, in the Study of Nature and of God." And this is as good a description of the book as we can give. A. D. F. Randolph & Co. $1.

"TRUTHS AND UNTRUTHS OF EVOLUTION," By John B. Drury, D.D., contains the Vedder Lectures delivered in 1883 before the Theological Seminary and Rutgers' College, at New Brunswick, N. J. In the course of the lectures the able and learned author concedes the possibility of the truthfulness of a certain form of the evolution hypothesis, and endeavors to show that when what seem to be its truths are separated from its untruths, there is nothing in it which need make a believer in God and in a revelation fear it as a foe. The fairness of the author is admirable. If questions of the relations of scientific progress and religious belief be always treated in the spirit of this book, we shall all be happier and wiser. A. D. F. Randolph & Co., N. Y. $1.

"THE GREAT ARGUMENT," by William H. Thomson, Professor in Medical Department of University of New York, has its *animus* set forth in the sub-title, "Jesus Christ in the Old Testament." Jesus and doctrinal Christianity were in the Old Testament and in the religion which that sacred book set forth: none but Jews could have propagated Christianity; the first apostles made their appeal to the Scriptures of the Jews; in so doing they committed their cause to a line of argument whose soundness can be tested as well in one age as in another, while "the import of its conclusions would be felt" as deeply in one age as in another. This claim of the early apostles Professor Thomson subjects to a rigid examination, tracing the Messianic prophecies and comparing them with the history. His work is ably done and his book will make his readers acquainted with the Old Testament and with the New under a light which will enhance the appreciation of both. Harper & Brothers.

"SOURCES OF HISTORY IN THE PENTATEUCH" is a compact, lucid, interesting and critical treatment, in six chapters, of the Pentateuch as furnishing the sources of the histories of the earlist cosmogony, early man, the early arts, the early consanguinities, the early movements of the nations and the early documents. In a valuable appendix is an extract from "Strack on the Pentateuch." The author is President Samuel C. Bartlett, D.D., LL.D., of Dartmouth College. Publishers, A. D. F. Randolph & Co., New York City. $1.25.

"RESURRECTION IN NATURE AND REVELATION: AN ARGUMENT AND A MEDITATION." The Rev. Dr. Faunce, in these pages, discusses the questions concerned with man's resurrection, in a quiet, calm, warm, and discreet manner. The argument is rather imbedded in the meditation than standing forth. We commend the book as specially adapted to the Sunday reading of thoughtful people, who do not allow themselves severe brain-work on the day of rest, and yet wisely avoid the thin religious diet so often offered. A. D. F. Randolph & Co. $1.50.

Perhaps we have the sympathy of a number of our readers in the feeling that there has as yet been furnished no satisfactory treatise on *Ethics*. This does not cause us to undervalue any real contribution to the discussion of the profounder questions of morals, or any hand-book helpful in the work of instruction in theoretica land practical morality. Messrs. A. S. Barnes & Co. publish "A MANUAL OF MORAL PHILOSOPHY" [$1.25], by Andrew P. Peabody, D.D., LL.D., of Harvard University. It is

designed for High Schools and Colleges. It is elementary and practical. Dr. Peabody could not write badly. His long experience as Professor of Christian Morals has given him preparation for such a work as this. The same publishers give us Paul Janet's "ELEMENTS OF MORALS." This is probably the one work of its distinguished author which could be made of use to schools and colleges. He follows Kant in teaching that moral good is founded on a natural and essential good. He is a religious moralist. The translation is made by Mrs. C. R. Corson.

"HEBREW LESSONS," by H. G. Mitchell, Ph.D., Professor in the School of Theology in Boston University, is a very admirably printed book. We lay stress on this as being of very great importance with Hebrew. It is really a very beautiful specimen of typography. It is an excellent book for beginners who have teachers. Published by Ginn, Heath & Co., Boston. $1.80.

"PUBLIC RELIEF AND PRIVATE CHARITY," by Mrs. Josephine S. Lowell, is one of Putnam's series, "Questions of the Day." It is a compilation of statements of the principles upon which charity is administered in this and other countries. G. P. Putnam's Son's. $1.25.

"OCCIDENT, WITH PRELUDES ON CURRENT EVENTS," by Joseph Cook. Advanced thought in the leading lands of the world is treated of in this volume in Joseph Cook's vigorous and interesting way. The lectures contained in this handsome volume were delivered last season in the Boston Monday Lecture Course. Houghton, Mifflin & Co., Boston, Mass. $1.50.

"THE FOUNDATION OF DEATH: A STUDY OF THE DRINK QUESTION," scarcely gives one a fair idea of the intent and value of the work bearing this title, for which we are indebted to Mr. Axel. Gustafson. It is a cyclopædia of information in the various departments of thought and effort suggested and started by the paramount sociological interests connected with the use of alcoholic liquors. The author says truly that the world-literature on alcohol is enormous. He has shown skill and industry in selecting and digesting. We have here the best book of reference on the subject with which we are acquainted. It is republished in this country by Ginn, Heath & Co. $1.34.

"SOME HERETICS OF YESTERDAY," by the Rev. Dr. S. E. Herrick, minister of Mount Vernon Church, Boston, Mass. The heretics treated of in the twelve chapters of Dr. Herrick's book

are, Tauler and the Mystics, Wiclif, Huss, Savonarola, Latimer, Cranmer, Melancthon, Knox, Calvin, Coligny, William Brewster, and Wesley. The lives, labors, and characters of these men are used by the author to emphasize "the perpetual privilege of intellectual readjustment." Houghton, Mifflin & Co., Boston, Mass. $1.50.

"PASTORAL THEOLOGY," by James M. Hoppin, D.D., of Yale College, is published by Funk & Wagnalls, New York, for $2.50. In this companion-book to "Homiletics," by the same author, we have a substantial addition to the already large literature of the subject. The gifted author brings to his work heart and brains, and while drawing on the historic literature of his topic, is fully abreast of our times. The work is undenominational and is bright, comprehensive, suggestive, stimulating, and so of especial value to the theological student and young minister. We think that the author has accomplished his purpose as thus expressed in his preface: "My endeavor has been to make such a book as I would wish to have had when a theological student and young pastor—one that would be of real aid in the studies, inquiries, trials, and mental and moral preparation for the strenuous work of the ministry."

"THE APOSTLES' CREED," by C. R. Baker. The ten lectures contained in this little book were delivered in the Church of the Messiah, Brooklyn. Their object is not critical nor philosophical, but experimental. They are written to test the reader as to whether or not he is a Christian, and to stimulate him in the spiritual life. The author writes with clearness, liberality and Christian unction. T. Whittaker, 2 Bible House, New York.

"THE SHORT HISTORY OF THE REFORMATION," from the pen of Bishop Hurst, whose ability and conscientiousness are shown in all his works, is a compact and satisfactory statement of the antecedents and the progress of the great ecclesiastic revolution of the fifteenth century. Harper Brothers.

John Laird Wilson's "LIFE OF WYCLIFFE," is published in the Standard Library of Funk & Wagnalls for 25 cents. A most timely publication, as a contribution to the celebration of the 500th anniversary of the "Morning Star of the Reformation."

A NEW BASIS FOR THE PHILOSOPHY OF CONVICTION.

[A Paper read before the American Institute of Christian Philosophy, December 4th, 1884.]

By Edward J. Hamilton, D.D.,

Professor of Mental Science in Hamilton College, N. Y.

THE principal discussions of Mental Philosophy concern belief, knowledge and conviction generally. They relate to our first perception of things, to our memory and recollection of them, and to the use of our rational faculties in the pursuit of further knowledge. The element of conviction enters into every form of intellectual activity save that only of conceiving or imagining; and it has important relations with this activity. For, although conception may take place without conviction, conviction cannot take place without conception: that is, we cannot believe in the existence, or in the non-existence, of anything, without having an idea of that which we assert to be or not to be. Besides, the various modes of conviction, for example, those expressed in the simple assertion of fact, in the axiom, in the inference, in the generalized statement, and in judgments of possibility or of probability, cannot be explained except in connection with certain modes of thought or conception, on which they are conditioned. Thus we see that the philosophy of conviction constitutes the greater part of mental science, and has intimate relations with the remaining part.

THE DIVERGENCIES OF SCHOOLS AND SYSTEMS PERTAIN TO THIS DOCTRINE.

1. The past history of philosophy illustrates this fact. The earliest thinkers theorized on the knowledge which the soul receives through the avenues of sense. Then the reproductive power of memory was discussed. After that some account was attempted of the more fundamental principles of human faith and

practice. And finally Aristotle, reviewing the doctrines of his predecessors, added to them his own analysis of the workings of the reasoning faculty. Thus, several centuries before our Saviour's time, theories of conviction entered into the beginnings of philosophy; they have been the subjects of study and consideration ever since; and, what may seem strange, they are even yet topics of difference and debate. For the philosophers of to-day are radically divided on questions pertaining to our immediate perceptions, to our reproduced cognitions, to our general principles of judgment, and to our rational apprehensions and conclusions. Notwithstanding important advances which have been made in the analytical knowledge of our mental operations, it is noticeable that the principal divergencies of the great schools of modern speculation relate to the origin and nature of our cognitions and beliefs. Any one acquainted with the peculiarities of Cerebralism, Associationalism, Kantianism, Idealism and Intuitionalism, can satisfy himself that the philosophy of conviction is yet under discussion. For none of these conflicting systems has failed to secure many intelligent adherents.

The existence of these large opposing schools, within each of which also, considerable difference of opinion prevails, renders it supposable that some defect may be discovered in every theory yet-formed respecting the nature and laws of belief; and the feeling arises that a new doctrine should not be rejected without some consideration. It is true that philosophical novelties, like mechanical inventions, prove, for the most part, to be of very little value; yet in a case like the present, one deserves a hearing, who has not overlooked the progress of preceding thinkers, and who has sought clearness of apprehension through an independent examination of the phenomena to be explained.

A WIDE USE OF THE TERMS BELIEF, JUDGMENT, AND CONVICTION.

2. It is proposed, therefore, in the discourse now begun, to sketch briefly the more prominent theories respecting conviction, which have hitherto been held; and then to expound a new doctrine. But before proceeding with this task, we claim a privilege generally accorded to those who engage in philosophical discussion. We would use some terms in a very wide sense.

The word belief often indicates a degree of intellectual confidence which falls short of knowledge, and which yet is stronger than mere guess-work or presumption. We sometimes say that we believe, but that we do not know, that so and so is the case. But now let us include under belief every act of the mind in which we take, accept, or hold a thing as true, whether we do this feebly or firmly, and whether we have good grounds for doing so or not. In this sense belief admits of many degrees, and varies from the merest presumption of possibility to the most perfect assurance of fact; and it includes knowledge. For knowledge is nothing else than absolute and well founded certainty.

We also desire to make a wide use of the term judgment. This ordinarily signifies the faculty of forming probable beliefs or convictions. Mr. Locke says, "The faculty which God has given to man to supply the want of clear and certain knowledge, where that cannot be had, is judgment, whereby the mind . . . takes any proposition to be true or false without perceiving demonstrative evidence in the proofs." According to this meaning, judgment, as the initial act of belief, must be distinguished from cognition, which is the initial act of knowledge. Let us, however, give the same extension to the term judgment that we have already given to the term belief; and, in that case, of course, we must admit cognition to be a kind of judgment, in the same way that knowledge is a kind of belief. This wide sense of the term judgment is very commonly employed by the philosophers and logicians of the present day.

By a natural metonomy the terms belief and judgment are applied to the operations and mental products of these powers as well as to the powers themselves. We speak not only of belief and judgment, but also of beliefs and judgments, and of a judgment or a belief. This secondary use of language, which need cause us no confusion, should be granted the same extended application which we have asked for the more primary.

Because in determining a probability, the reasons for doing so become more or less prominent in thought, judging generally means, not simply the formation of belief, but the formation of belief on evidence. It will matter little for our present purpose whether this be included in our conception or not, although it is

true that one believes always on some ground. In like manner the word conviction, which signifies a belief necessitated by some evidence, may be now used as simply synonymous with belief.

EVERY BELIEF OR CONVICTION MAY BE EXPRESSED BY A PROPOSITION.

3. Here also, as another preliminary, let us state a point on which philosophers are agreed. It is that every act of judgment or belief may be expressed by means of a proposition. This need not be argued as regards the convictions of the rational faculty; every one knows that these are expressed by propositions. And, as concerns the cognitions of immediate perception, it can be easily shown that these, when analytically expressed, instantly assume the propositional form. This has been done by President Porter, who calls these presentational cognitions "primary, natural, and psychological judgments." For example, holding an orange and looking at it, one can say, "This object exists, and it is round, and rough, and yellow." Then, opening and tasting it, he can add, "This round, rough, yellow object is sweet and juicy." But these statements, expressive of one's immediate perceptions, are regular propositions, such as logicians describe. ("Human Intellect," § 429.) The reason why sense cognitions and rational convictions can both assume the propositional form, is that they have a community of nature. Both are judgments, in the wide sense of that term. Indeed presentative knowledge is transformed into logical knowledge simply by analytical elaboration. The beliefs of memory, which are reproduced cognitions, may also, of course, be set forth in propositions.

ARISTOTLE'S "SOMETHING OF SOMETHING."

4. The views of philosophers regarding the radical nature of our beliefs or convictions, are given to us mostly in their doctrines concerning judgment, and concerning the proposition, as the form which every judgment takes when fully expressed. Aristotle ("Prior Analytics," chap. i.) defines a proposition to be "*a sentence which affirms or denies something of something.*" The most important word in this statement is the preposition "of," signifying the connection of one thing with another. The dotrine of Aristotle is that a judgment is the acceptance or

the rejection, in our thought, of a union of things. Thus in asserting, "The man is handsome," we accept a synthesis; but in asserting, "The man is not handsome," we reject one. He inculcates this same doctrine when he says that "affirmation is the assertion of something *of, or concerning* (κατὰ), something, and denial the assertion of something *from, or away from* (ἀπὸ), something." And this is yet more especially taught when we are told, first, that "to be" and "not to be" (εἶναι and μη εἶναι) signify the truth and the falsehood (τὸ ἀληθὲς και το ψεῦδός) of the statements in which they are used, and then that these four predicables, existence, non-existence, truth and falsehood, pertain to the conjunction and separation of things. "To be," he says, "is to be united and one; not to be is to be disunited and many;" and he asserts that a proposition is true or false as setting forth things according, or not according, to their composition and division. *Περὶ γὰρ σύνθεσιν και διαίρεσίν ἐστι το ψεῦδός τε και τὸ ἀληθὲς.* ("De Interpretatione," chaps. iii., v., vi. and x., and "Metaphysics," Bk. IV., chap. vii., and Bk. VIII., chap. x.)

These teachings are the origin of the common doctrine that the copula—that is, the verb *to be* as the assertive part of propositions—does not have its own proper signification of existence, but indicates simply an agreement of ideas or a connection of things, and that "not to be," in like manner, signifies a disconnection, or disagreement, between subject and predicate.

LOCKE'S "AGREEMENT OR DISAGREEMENT" OF IDEAS—LEIBNITZ.

5. A doctrine, differing in form rather than in substance from that of Aristotle, was introduced into modern philosophy through the writings of Locke and Leibnitz. "*Truth*," says Locke, "*signifies nothing but the joining or separating of signs, as the things signified by them do agree or disagree with one another.* The joining or separating of signs, here meant, is what, by another name, we call propositions. So that truth properly belongs only to propositions; whereof there are two sorts, mental and verbal, as there are two sorts of signs commonly made use of, viz., ideas and words." He tells us, also, that it is in the exercise of the faculties of knowledge and judgment that "the mind takes its ideas to agree or disagree, or, which is the same

thing, any proposition to be true or false." ("Essay," Bk. II., chap. xxxii., § 19, and Bk. IV., chaps. i. and xiv.) Thus Mr. Locke makes judgment a joining or separating of ideas according to their agreement or disagreement, while yet he teaches that this agreement or disagreement does not primarily belong to our ideas, but to "the things signified by them." He differs from Aristotle chiefly because that, instead of the wide relations of connection and separation, which are indicated by κατὰ and ἀπὸ, he employs the more specific conceptions of agreement and disagreement. Both philosophers make judgment a composition or a division of ideas, in their use as representative of things.

Locke's statement has been adopted by most modern thinkers. First among these was Leibnitz, his great contemporary; who also gave it an important modification. Having repeated a teaching of Locke, that the agreement or disagreement of our ideas is of four different sorts, namely, those of Identity or Diversity, those of Relation, those of Co-existence or Connection, and those of Real Existence, he observes that *Relation*—the second of these categories—*if taken in a wide sense, may include them all.* He concludes, therefore, that all our knowledge is a perception of relations. He teaches also that some relations are those of *comparison*, for example, those of identity, diversity, likeness and unlikeness; while others are those of *connection or co-existence;* and then he declares that *the most important of these relations of connection is that of real existence.* And he says that this existence, when predicated of an object, may be regarded as the conjunction of the object with one's self. "On peut aussi concevoir l'existence de l'objet d'une idée, comme le concours de cet objet avec moi." ("Nouveaux Essais," Liv. IV., chap. i.) The main doctrine of Leibnitz reappears in the writings of Sir William Hamilton, President Porter and others, who teach that judgment is the faculty of perceiving relations and of uniting objects in thought by means of this perception. (Hamilton's "Met.," Lect. xx.; Porter's "Human Intellect," Part III., chap. v.)

REID—J. S. MILL—"A PREDICATE OF A SUBJECT."

6. The wonderful vitality of the Aristotelic doctrine of con-

viction may be seen in the preference given, by various leading authors since the time of Locke, to the ancient form of statement. Thomas Reid, the father of modern Intuitionalism, having stated that, "the definition commonly given of judgment by the more ancient writers in Logic, was that it is an act of the mind whereby one thing is affirmed or denied of another," declares, "*I believe this is as good a definition of it as can be given.*" And John Stuart Mill, the Associationalist apostle, says, "A proposition is a portion of discourse in which a predicate is affirmed or denied of a subject." This is the teaching also of Herbert Spencer.

One remark of Mill's is noticeable as betraying an unconscious dissatisfaction with the leading doctrine advocated by himself and by his school—the doctrine that belief may be accounted for by a strong or inseparable association of ideas. He says, "To determine what it is that happens in the case of assent or dissent, besides putting two ideas together, is one of the most intricate of metaphysical problems."

Like Leibnitz and Locke, Mill gives a classification of things predicable. He says, "*Existence, co-existence, sequence, causation, and resemblance*, one or other of these is asserted or denied in every proposition without exception." He also offers a definition of existence similar to that of Leibnitz. "*The existence of a phenomenon is but another word for its being perceived, or for the inferred possibility of perceiving it.* My belief that the emperor of China exists, is simply my belief that, if I were transported to the imperial palace, or some other locality, in Pekin, I should see him. My belief that Julius Cæsar existed, is my belief that I should have seen him if I had been present in the field of Pharsalia, or in the senate-house at Rome." In other words, according to Mr. Mill, when we assert existence of some object, we assert that it is related to us in that it is, or might be, perceived. (See Reid's "Essays," Mill's "Logic," and Spencer's "Psychology.")

KANT—"DIE SINNLICHKEIT UND DIE VERNUNFT."

7. Let us now turn to the opinions of Immanuel Kant, who laid the foundations for German Idealism at Koenigsberg, while Reid was expounding Intuitionalism in Glasgow. Kant's gene-

ral term for conviction of every kind and degree is "Erkenntniss," or cognition. This results from the application of the conceptions of the understanding (Verstand) to the intuitions or representations (Anshauungen) of the sensuous faculty. These are not intuitions or representations in any English sense of the words; for we are not to suppose that anything is really perceived or represented. They are rather mere felt appearances. Judgment (Urtheilskraft) is the faculty which unites a plurality of intuitions into a unity under some concept (Begriff) of the understanding, and so produces a cognition. Cognition, therefore, is the product of the synthetic action of Thought and Sensibility. For example, should the sensuous faculty (die Sinnlichkeit) give certain feelings indicative of size, solidity and downward pressure, then the judgment, *using the categories of substance and of reality*, would assert, "This is a heavy body." But if such sense-intimations were not given, but only imagined, then the judgment, retaining the conception of substance, but *employing the category of possibility instead of that of existence*, would say, "There might be such a thing as a heavy body." This may explain Kant's meaning when he condemns the doctrine that "a judgment is a representation of a relation between two ideas," and teaches that "a judgment is nothing else than the mode of bringing given cognitions to the objective unity of the consciousness," that is, to that oneness of conception which conscious intelligence requires. Moreover, according to Kant, the categories, or concept-forms of modality; namely, possibility, reality, and necessity; though they help to give unity to our cognitions, do not enlarge the conception of the object, "*but only express its relation to the faculty of cognition*—sondern nur das Verhältniss zum Erkenntnissvermögen ausdrücken." In other words, like Leibnitz and Mill, he makes the existence of an object to consist in its being related to our faculties. (Compare Lotze, "Outlines of Metaphysic," § 10.)

THE COMMON ERROR OF PHILOSOPHERS RESPECTING CONVICTION.

8. We have now briefly stated the opinions of leading philosophers respecting the action of the mind in believing. First, Aristotle makes it *an affirming or denying something of something;* then Locke teaches that *it is the joining or separating of*

ideas according to their agreement or disagreement. But these both hold that we judge of entities really separate and different from ourselves. Mr. Mill also says that the subject and predicate, which are employed in affirmation or denial, stand for things; his "things," however, prove to be nothing more than *mere feelings, or possibilities of feeling, which tend to unite or to separate by reason of some habit or association.* Finally, Kant, more directly, explains belief as a purely subjective synthesis, which gives us no reason to believe in things separate from, or beyond, the exercise of our own faculties. He calls certain "cognitions" *objective, only because they follow a fixed order and not the choice of our wills.*

The doctrine common to all these philosophers, and to many others represented by them, is that *conviction is essentially a process of the composition or division of mental states;* for even Kant, who speaks mostly of synthesis, would say that the judgment of disbelief involves the separation from one's thought of the category of reality.

We are convinced that these various teachings are erroneous in the extreme; that every one of them arises from imperfect analysis and confused perceptions; and that no satisfactory philosophy of conviction is possible, unless a new basis for the construction of it can be found.

Our reasons for this judgment might be presented in the shape of objections to the foregoing theories. But we propose to take a course, which, if it can be successful, is certainly to be preferred. We shall endeavor to explain the leading points of a new doctrine. For no better method of refuting error can be devised than the direct statement and elucidation of the truth.

THOUGHT DISTINGUISHED FROM BELIEF, OR CONCEPTION FROM CONVICTION.

9. Let us begin by making a distinction which seems fundamental. It is that between *thought and belief*, or between *conception and conviction.* The necessity for this discrimination arises from certain ambiguities which affect our natural use of language. We often speak of thinking when we mean that we do *not merely think* of things, but that we also have some *mental persuasion* about them. One, observing certain appear-

ances, might say, "I think, though I do not know, that it has rained to-day," or "that it is going to rain to-morrow." In such a case thinking plainly includes a kind of conviction less confident than the certainty of knowledge. But, in addition to this use of the terms thought and thinking, and to other similar uses, we sometimes say that we are *merely thinking* of things, or have the *mere thought* of them, unaccompanied by any belief in their existence. After this manner, for example, we think of centaurs and mermaids.

Moreover, as thinking often includes a believing which takes place in connection with a certain mode of thought, so believing frequently includes the form of thought which some conviction accompanies. I can say, "I believe—or it is my belief—that it has rained to-day, or that it will rain to-morrow"; in which case I mean both that the proposition stated is *conceived of* by me and that it receives my *intellectual assent*. Hence, also, one's creed is his belief. But, while the terms thought and belief thus encroach on each other's territories, each has a territory of its own, and *we can distinguish thought, as the mere conceiving of things, from that belief which may or may not attend that conceiving*. This distinction is the same as that between *conception* and *conviction*, when these things are considered as exclusive of one another, and when conviction is spoken of as accompanying conception and conditioned upon it; and it is the basis for that discrimination which logicians make between simple apprehension and judgment.

Though this difference between thought and belief is a fundamental fact in mental science, it has been greatly overlooked and neglected by philosophers. *To this cause we ascribe the failure of many to form a correct doctrine of cognition or knowledge.* For knowledge evidently is of a twofold nature; it comprises, first, the conception of an object as existing, and secondly, an absolute and well-grounded conviction as to its existence. But, if this be a correct definition, we must reject Kant's doctrine that every form of conviction is a kind of knowledge; and we must yet more decidedly disagree with Sir Wm. Hamilton and President Porter, who say that knowing is the generic term for every mental state.

THE COMMON ACCOUNT OF PROPOSITIONS DEFECTIVE.

In like manner *the account commonly given of propositions overlooks the difference between a proposition thought and a proposition believed.* For logicians generally—for example, President Porter and President McCosh—teach that "a proposition is a *judgment expressed in words*," thus repeating, in another form, Aristotle's definition, that a proposition is a sentence in which we affirm or deny. This is not a satisfactory statement. It is a definition of propositions from the chief use we make of them, and not from their own nature. A proposition may be completely formed and enunciated without any judgment. At the beginning of every criminal trial the jury has two propositions in mind, viz.: "The man is guilty," and "The man is not guilty"; but neither of these are yet matters of judgment or belief. Dr. Reid calls our attention to this point. "A proposition," he says, "may be simply conceived, without judging of it. But, when there is not only a conception of the proposition, but a mental affirmation or negation, an assent or dissent of the understanding, *that is judgment.*" Let us remember that we may think and state propositions without entertaining any belief respecting the matters which they bring under our consideration.

ESSENTIAL POINT—ALL BELIEF IS CONDITIONED ON EXISTENTIAL THOUGHT.

10. We pass now to a *second* and most important point. It is that, while belief is conditioned on thought, there are only two modes of thought in connection with which belief is possible. To state the matter more explicitly, we say, that *every exercise of conviction must take place either in connection with the thought of the existence of a thing or in connection with the thought of its non-existence.* Or—as these two modes of conception have something in common—we may class them together, and assert, "*All belief is conditioned on existential thought;*" by which, of course, we do not mean that all belief is conditioned on the thought of the existence of a thing, but only on the thought of its existence or on that of its non-existence.

The doctrine, thus stated, is so simple and so evident, that one wonders whether there can be any discussion over it. It is

undeniable that, in belief, we always say that something is, or was, or shall be, or might be, or would be, or may be, or must be; or else the contrary of these things; always attaching conviction to the thought of the existence, or of the non-existence, of something. Yet such is not the doctrine of the philosophers. For they say that, in judging, we do not merely assert a thing *to be or not to be*, but that we affirm or deny *one thing of another;* or recognize the *agreement, or disagreement*, of two ideas; or perceive a *relatedness, or a non-relatedness*, between objects, or between conceptions; or effect *some synthesis, or some separation*, of mental states. Let us discuss this new theory and see whether it has any value.

ATTRIBUTIVE DISTINGUISHED FROM CONCRETE EXISTENCE, OR ENTITY.

We must start with a consideration of the thoughts of existence and of non-existence. It is scarcely necessary to say that by the existence of a thing *we do not mean the thing itself.* We often do designate things as beings or existences; but the existence now mentioned is what might be called *attributive* existence, because, though it is not properly a qualtity or attribute of things, it can be attributed to them. The things themselves, as named from this circumstance, might be distinguished as *concrete* existences, and often are distinguished as *entities.*

Now we can perceive and consider this existence of a thing just as we do the nature of the thing which exists, and therefore we can speak of it as an object of thought. Evidently, however, it is not an object like those commonly spoken of; they are beings or entities, while existence is not an entity, but only belongs to an entity. When, therefore, owing to the poverty of language, existence seems to be mentioned as a thing or object, such language is not to be taken in its full force. It only implies that existence, while not an object in the ordinary sense, has what we may call objectuality. For it may be perceived like any object.

THE MISTAKES OF LEIBNITZ, MILL, AND KANT.

This attributive existence is of an absolutely incomplex nature and is incapable of analytical definition; nor can the conception of it be made more intelligible than it is to every unsophisticated mind. Aristotle's doctrine that the existence of a

thing consists in its composition, or in its unity if it be not composite, and the teachings of Leibnitz, John Stuart Mill, and Kant, that this existence is a relation of the object to our faculties of knowledge, may seem, to some, unnatural mistakes. But they were necessitated by the theories of conviction held by these distinguished men. We could show this, were there need for it. At present let us assume what is now generally conceded, and what seems perfectly clear, that existence is a thing *sui generis*, and so simple as neither to admit, nor to need, a definition.

Here, also, let us guard against *the error that there are two kinds of existence, the real and the ideal.* That, only, exists which is real; the ideal does not exist at all. The soul has the wonderful power of thinking of things that are not as if they were. It can conceive of objects and of their existence while there are no objects corresponding to its thought. When it does so, we are often said to be thinking of *ideal objects* or of *supposed existences.* Literally and truly, we are not thinking of objects at all, but only *as if of objects;* nor of existences at all, but only *as if* of existences. When we thus mention things and seem to be speaking of them, our language expresses merely conception unattended by belief, and then—in order to indicate this fact—we add the word *ideal* or *supposed*, or such phrases as *in imagination* or *by supposition.*

BOTH EXISTENCE AND NON-EXISTENCE MAY BE MATTERS OF FACT.

The thought of non-existence is very similar in character to that of existence; and it is just as simple, and as underived, a conception. It is expressed by a compound word, but this does not indicate that it has a compound nature, but only that it is diverse from existence. Nor is it designated non-existence because we cannot conceive of it in itself, but only because its whole importance lies, not in its own nature, but in that it is *not* existence.

As we have said, existence is not a thing or entity; and this, certainly, is true also of non-existence. Yet non-existence, no less than existence, may be perceived and may be a fact, and therefore may be said to have objectuality. It is just as much a fact that there is no bread in the house, when there is not any,

as that there is bread, when there is some; or that the man is not guilty, when this is true, as that he is guilty, when that is true.

Existence and non-existence, however, differ noticeably in this respect, that *existence brings all that it touches within the realm of fact and objectuality, while non-existence excludes from that realm everything that it touches, or rather appears to touch.* There is nothing objectual or factual about a nonentity save its non-existence. When we are said to think of non-existent objects, we certainly do not think of any object, for no object exists; we simply unite the mere conception of the object, unattended by any belief in its existence, with the conception of non-existence, and then exercise belief in connection with the thought so formed.

POSITIVE, NEGATIVE, AND FORMAL THOUGHT OR CONCEPTION

If all this be true, it is evident that there are two general classes of existential conceptions, the positive and the negative; and that, in the one of these, we combine the thought of an object—that is, of its whole nature, content, constitution, or form—with the idea of its existence, while, in the other, we combine this same conception with the thought of non-existence. Thus we explain the difference between *bread* and *no bread*, *guilty* and *not guilty*. Sir William Hamilton, President Porter, Prof. Bowen and others contend that "no thought is possible except under the category of existence;" that, "thinking an object, we cannot but think it to exist; in other words, we cannot annihilate it in thought." But this certainly is contrary to experience. For how could we think and say that an object does not exist, if we must conceive of it only as existing? Indeed, instead of the doctrine that there is only one ultimate mode of conception, we would prefer to say that there are *three*, in the first of which we can think of an object *as existing*, in the second of which we can think of it *as non-existent*, and in the third of which we can think of it *without reference either to its existence or non-existence.* This last-mentioned mode of conception might be distinguished as *formal*, for it takes place when, exercising a special abstraction, we think merely of the quality, or nature, or constitution, or form of an object. The ancient doctrine of forms may be traced

to an erroneous interpretation of such formal thought. We cannot, of course, really perceive any nature or form unless it exist, yet we think of a nature sometimes without reference to its existence. But, be this as it may, it is sufficient for our present purpose to say that we can conceive, not only of things as existent, but also of things as non-existent. Because of this negative mode of thinking we find in all languages such words as *nobody*, *nothing*, *nemo*, *nullus*, *personne*, *rien*, *niemands*, *nichts*, and such expressions as *no bread*, *no work*, *no freedom*, *no justice;* all of which stand for ideas, derived, indeed, from positive conceptions, but differing from them because the thought of existence is dropped from the positive conception, and the thought of non-existence inserted in its place. Such then are the two modes of thinking, one or the other of which must be employed in every exercise of judgment or belief.

EVERY PROPOSITION THE EXPLICIT STATEMENT OF AN EXISTENTIAL THOUGHT.

11. We have now considered the distinction between thought and belief, and the nature of those modes of thought which condition belief. We are thus prepared for a *third* point of statement. For some one may ask, "*How does this new theory agree with the admitted fact, that every judgment may be expressed by means of a proposition?*" We reply, that a very satisfactory proof of the new doctrine may be found in a right understanding of the essential force of propositions. Because, on examination, we discover *every proposition* to be nothing else than the *explicit statement of an existential thought.* For we may divide propositions into two comprehensive classes, and may say that the function of one of these classes is to set forth the existence, or the non-existence, of the *subject-object* of the proposition, and that the function of the other class is to set forth the existence, or the non-existence, of the *predicate-object* of the proposition. In illustration of the first class we may say, "God exists," or "God does not exist;" because, in these statements the subject is set forth as existing, and as non-existent. The second class may be exemplified by the statements, "God is wise," "God is not selfish;" for in these we assert the existence of wisdom, and the non-existence of selfishness in God.

THE PREDICATION PROPER.

It is marvellous that *the distinction now presented is not to be found in any logical treatise, and cannot be expressed in the terminology of any text-book.* Both classes of propositions—those which assert the existence or the non-existence of the subject, and those which assert the existence or non-existence of the predicate—are placed without discrimination under the head of predications. Let us note, however, that propositions of the second class have a better right than those in the first class to be styled predications; for it is only in them that we truly predicate *one thing of another.* The statements, "God is wise—God is not selfish," may be described as an affirming and a denying one entity of another; for wisdom and selfishness are both things, or entities. But, when we say, "God is," or "God is not," we do not predicate one thing of another; for existence and non-existence are not things; we only assert existence or non-existence of God. We might, therefore, distinguish propositions of the first class as *simple existential statements* and say that those of the second class are *predications-proper.*

Now that every predication-proper sets forth the existence or the non-existence of its predicate-object may be shown, because such a proposition *can always be converted*, by a little ingenuity, *into a direct existential statement.* For example, instead of the ordinary mode of expression, we can say, that "Wisdom, as something in God, exists," and that "Selfishness, as a divine attribute, does not exist." So, also, instead of "John walks," or "John is not walking," we can say "Walking as an action of John, exists," or "does not exist."

THE ORIGIN AND USE OF PREDICATIONS PROPER.

But here some one may argue, "If such be the essential significance of predications, *why do not men say just what they mean?* Why do they not always employ simple existential statements?" We reply that the ordinary forms of speech do express just what men mean, and this, too, in the best possible manner. For sometimes we desire to say that something considered *per se*, or without reference to its connections with other things, exists or does not exist; and then we use the direct mode of statement. But, more frequently, we wish to assert the

existence or the non-existence of something *as in relation to something else which is already known or assumed to exist;* in this case we find it convenient to mention first, and as the subject of the sentence, that which is already known to be, and then, in the predicate part of the proposition, to present that, the existence of which is asserted or denied. For we must mark that *no predication-proper ever asserts or denies the existence of its subject.* The statement, "John is not walking," does not assert the non-existence of John; nor does the statement, "John is walking," assert his existence. In each case John is assumed as a fact already known, and the assertion concerns only the walking as related to John.

THE ORIGIN OF THE COPULATIVE VERB.

Moreover, there is no inexplicable mystery in the circumstance that the copulative verb, though in immediate grammatical relation to the subject, sets forth the existence or the non-existence of the predicate. Primeval language appears to have had no term to express the abstract idea of existence. To indicate this thought, verbs signifying to *begin*, to *grow*, to *breathe*, to *live*, to *stand*, to *remain*, were employed, because such verbs specially directed attention to the existence of that which began, or grew, or breathed, or lived, or remained. Hence *existere*, in Latin, meaning to emerge, and γενέσθαι, in Greek, meaning to be born, came to signify existence. To this cause, also, we trace the various irregular parts of the verb *to be* both in our own, and in other languages. The English *is* and *am*, the Latin *sum* and *esse*, and the Greek εἰμί and εἶναι are identical with the Sanskrit *asmi*, signifying originally to breathe, and "the meanings of which were probably developed in the following order: breathe, live, be." (Curtius' "Greek Etymology," § 378.) The German *bin* and *bist*, the English *be* and *been*, and the Latin *fui* and *futurus*, are identical with φυέσθαι, signifying to grow or spring up. *War* and *gewesen* in German, and *was* and *were* in English, are derived from a Sanskrit root (*was*) meaning to dwell or stay. When, therefore, our distant forefathers would assert the existence of some one, they said, "The man was born," or "The man dwells," or "The man shall breathe;" birth, dwelling, and breath being mentioned simply to indicate being

After a period of such use these verbs lost their original and proper force, and came to signify existence only.

But now it will be seen that, *before these verbs lost their own peculiar meanings, they were fitted to indicate the existence of the predicate placed after them just as well as that of the subject placed before them.* For, in saying, "The tree stands *strong;* the tree grows *high;* the tree remains *green,*" the adjectives *strong, high, green,* are connected with the verbs after the manner of grammatical limitation; and the whole stress of the predication plainly falls on them. So, even to our ears, the expressions, "He lives righteous; he breathes happy," would assert the existence of the righteousness and of the happiness of some one; while "He breathes not happy; he lives not righteous," would indicate the non-existence of these things. Clearly the verb *to be,* even in its secondary use as the copula in predications, is employed to signify existence and non-existence; and so it is put beyond question, that the essential aim of every proposition is to express existential thought.

JUDGMENT AND BELIEF DEFINED.

12. Judgment and belief, therefore, *are not a conjunction or a separation of our conceptions of things; they are an exercise of mental confidence in connection with the thoughts of existence and of non-existence.* Accordingly we can conceive of things both synthetically and analytically without any exercise of belief respecting the things conceived of; we can entertain convictions concerning things viewed separately as well as when they may be considered with reference to their connections; and, even when we do use the composition or the separation of thought in the expression of our belief, it cannot be said that the mental compounding of things is specially connected with affirmation, or that the mental partition of things is specially connected with denial. For a union of things may be non-existent, and may be denied; and a separation of things may be existent, and may be affirmed. One wonders at the confusion affecting the doctrines of philosophers respecting judgment and conviction. We trace it to their failure to note the difference between thought, and the belief which may or may not, accompany thought, and to their attempt, consequent upon this want

of discrimination, to explain belief and disbelief as a compounding and a dividing of conceptions.

But here some one may say, "Granting that the fitness of propositions to express conviction arises from their being forms of existential thought, and that some propositions set forth the existence or non-existence of the subject, while others set forth the existence or non-existence of the predicate, yet, *in this latter class of statements—which have been distinguished as predications-proper—is it not true that the thing immediately judged and asserted to be or not to be, is always and essentially a relation, that is, the relation between the subject, and the predicate, objects of the proposition?*" Evidently the doctrine thus suggested, while conceding the main points for which we have contended, would somewhat justify the teachings of those who say that all judgment and cognition consist in the perception of relations.

We cannot, however, accept this doctrine. We cannot allow that predications-proper set forth only the existence, or non-existence, of relations. Such sometimes is their force; more frequently they express belief in regard to things which are, indeed, related, yet which are not relations. When we say "John walks—or is walking," we set forth, not the relation of the action to the agent, but the existence of the action. The relation is implicated in the fact of the action, but is not the point of the assertion. Aristotle teaches the true doctrine, when he says, that predication deals, not with relations alone, but with "*whatever may be inherent or non-inherent in any subject.*" That is, predication sets forth whatever may or may not be naturally *conjoined in being* with any given entity. For spaces, times, quantities, qualities, powers, actions, changes, and combinations of these things, are all, in this way, set forth as existent or as non-existent.

RELATION ONLY ONE OF THE CATEGORIES OF PREDICATION.

Let us illustrate this point by quoting and applying the teaching of Aristotle. "*The categories*," he says, "*are ten in number; what a thing is, quantity, quality, relation, where, when, position, possession, action, passion*," and he adds that every proposition signifies either what a thing is, or some other

category. ("Topics," Bk. I., chap. ix.) We accept this statement so far as regards predications-proper. These categories seem to be an exhaustive classification of those modes of predicative conception which men naturally use. The first sets forth *what a thing is*, and has also been named οὐσία, or substance. It is that employed when we predicate one noun of another, either affirmatively or negatively; for example, "John is, or is not, a man." It is the generic form of that large class of propositions which Locke and Leibnitz place under the head of *identity and diversity*. For the thing immediately asserted to be, or not to be, is identity—that is, the identity of *John* with *a man*. This, though not expressed by any word, is indicated by the juxtaposition of the terms *John* and *man*, with only the verb *to be* between them; just as we indicate identity in saying "John, a man whom I saw yesterday," or "John is the man whom I saw yesterday." But it is essential to remark that this category does not use the relation of identity for its own sake; it employs it as the instrument of asserting or denying some nature of the subject. For John, being a man, must have all the attributes of a man; while, if he is not a man, if, for example, he is a horse, he cannot be said to have them. Thus this category uses one fact in order to state another.

Again, when we say, "John is six feet high," we assert that a certain *quantity* of height or length exists in John. When we say, "John is kind and strong," we state that the *qualities* of kindness and strength exist in John. The predication, "John is the son of William," is, in form, one of identity—a form under which every category may be expressed; but the essential fact set forth is a *relatedness* of John to William. "John is in a field," has a double force; it tells, first, that there is a field, and then, that John is in it. Hence the category of *place*, sometimes at least, asserts more than mere local relation. "John is coming at noon," in answer to the question "*when?*" also has a doubleness: it calls attention, first, to a certain length of *time* about to exist and elapse between the present time and noon; and then to the relation of simultaneity which shall exist between John's coming and midday. The categories of position and possession might perhaps be better named those of *posture*

and *condition;* they also have a complexity. But, evidently, when we say, "John is standing or waiting," "John is wealthy or well," we assert the existence of a certain posture or a certain condition in John. Finally, "John strikes" sets forth the existence of an *action*, in its relation to the *doer*, while "John is struck," presents the same in its relation to the *sufferer*. Thus affirmative predications assert the existence, and of course negative predications, the non-existence, of various forms or modes of entity.

BELIEF IN TRUTH OR FALSITY DISCUSSED.

13. At this point the following question may suggest itself to some thoughtful listener: "Would it not be better to say that we believe *in the truth or falsity of a thing*, rather than in the existence or non-existence of a thing; and would we not thereby avoid a difficulty connected with *hypothetical and abstract beliefs; for in them we make assertions regarding things entirely devoid of existence, or reality?*" Our answer to this query is that one never escapes difficulties in philosophy by endeavoring to avoid them, and that, in the present case, great confusion would result, should we assume that belief in truth or falsity is the ultimate and most simple mode of conviction.

Belief in truth or falsity may easily be distinguished from belief in existence or non-existence, because truth and falsity belong properly to ideas and propositions, whereas existence and non-existence may be said of entities in general. The "thing" which we take to be true or false is always a proposition, or an existential conception. But, since a statement is false whenever it is not true, let us simplify discussion by asking, "What do we mean by the truth of a proposition, the truth which belongs to thought?" This was well defined by the greatest of the Schoolmen. St. Thomas Aquinas says, "*Veritas intellectus est adæquatio intellectus et rei, secundum quod intellectus dicit esse, quod est, et non esse, quod non est:*" which might be rendered, "The truth of thought is a correspondence of thought and fact, according to which *thought says, that what is, is, and that what is not, is not.*" But, if this be so, it is evident that, in order to assert the truth of a proposition, we must *first* perceive a thing to be, or not to be, *then* refer to our conception

of the thing as existent or as non-existent, and *finally* recognize the correspondence between the conception and the fact. For no correspondence could exist or be perceived to exist save only between two existing things. Belief in the truth of a statement, therefore, presupposes belief in the existence, or non-existence, of things, and is itself a specific instance of this mode of mental action. *It is belief in the existence of a correspondence.*

It is to be noticed, too, that, for the most part, the truth of a proposition is affirmed, not for its own sake, but in order to assert the reality of that state of things which the proposition sets forth. In like manner non-reality is asserted when we affirm the falsity of a proposition. In its use, therefore, as well as in its nature, belief in truth or falsity shows a complexity. For these reasons this mode of belief cannot take the place of belief in the existence and non-existence of things, as a generic philosophical conception.

HYPOTHETICAL CONVICTION.

But, such being the case, it may be asked, "How then shall we explain our convictions regarding supposed and general objects; *for these do not exist, while yet we constantly assert concerning them that this or that proposition is true or false?*" We say and believe, "If there were smoke, there would be fire," when we know that there is neither fire nor smoke. We affirm of "man," in general, that he is a rational being, though no general man ever existed; we say also that rationality would be a characteristic of any imaginary man; and we assert that these things are true. The difficulty thus presented may be met in part by an exact statement of our doctrine. For it is not contended that belief always asserts the actual existence, or non-existence, of things, but only that *belief always takes place in connection with the thought of the existence, or non-existence, of things.* In order, however, entirely to dispel perplexity, let us attend to a distinction, an understanding of which is essential to any satisfactory philosophy of belief. It is that between *actualistic and hypothetical conviction.* This topic is treated of by Sir Wm. Hamilton in his lectures concerning *categorical* and *conditional* propositions and concerning *categorical* and *conditional* syllogisms. His doctrines, reproduced

from Krug and Esser, differ but little from those of logicians generally, and are confused and misleading in the extreme. Without discussing them we shall attempt an independent statement.

Actualistic belief is the assertion of literal fact, and is of two general modes, as originating in two general ways. First, we have *presentational cognition*, in which the soul intuitively sees and knows those realities which exist either within its life, or in immediate conjunction with that life. And, secondly, there is *illative or inferential conviction*, in which we perceive or believe one object to exist, because its existence is recognized as connected with that of another. The formation of this second mode of actualistic conviction is always dependent on that of the first; nothing can be inferred actually to be unless its existence can be seen to follow, either mediately or immediately, from some antecedent that has been actually perceived. On the other hand, *hypothetical belief is not the assertion of literal fact, and is only of one mode, as originating only in one way.* Moreover, it is to be explained by reason of *a connection and correspondence which it has*, not with the first, but *with the second mode of actualistic conviction.* Indeed, it is so closely related in nature to illative belief in fact, that both modes of judgment equally receive the same name, and are called *inference.* For the very same sequences of thought are used, and the very same degrees of conviction may be experienced, in hypothetical, as in actualistic, inference. This being so, the question arises, "Wherein do these modes of inference differ?" We reply, "*In the nature and origin of the belief, or mental confidence, which each involves.*" In actualistic inference the antecedent is asserted as a fact, and therefore the consequent is asserted as a fact: in hypothetical conviction the antecedent is merely supposed, or conceived, to exist; and therefore we say only that the consequent *would be fact, if the antecedent were.* If this be a true account of the matter, it is clear that hypothetical, no less than actualistic, belief, employs the thoughts of existence and of non-existence. In short, it is clear that hypothetical conviction, though not assertive of real existence, is simply *a mental preparation for belief in reality.* Because, so soon as fact takes

the place of supposition, in the antecedent, the conviction of *what would be* is displaced by the conviction of *what is*. When we no longer suppose, but believe, that there is smoke, we no longer infer that there would be, but that there is, fire.

NATURE OF GENERAL PRINCIPLES AND OF SCIENTIFIC TRUTH.

This doctrine of hypothetical belief as the assertion of an ideal existential consequence, has a very wide bearing. For many propositions and syllogisms, that are categorical in form, are hypothetical in nature; and this is especially true of all *general principles*, such as we use in reasonings. For example, when we say, "All men are mortal," this expresses more than a simple fact about all men that have ever existed; it asserts that, *supposing* there should be anywhere, or at any time, a human being, that man would be subject to mortality. Then, if we should say, "Magistrates are men," this would apply not merely to all actual, but also to any possible, or imaginary, administrators of law. And if, combining the propositions "All men are mortal," and "Magistrates are men," we should form the general conclusion, "All magistrates are mortal," this conclusion, also, would partake of the hypothetical character. But this character may perhaps be more easily seen in some proposition more abstract than those just considered. Let us say, "Every triangle of a given base and height has one-half the area of a parallelogram of an equal base and height." Plainly this statement applies to all conceivable parallelograms and triangles, as well as to any that ever have existed, or that ever shall exist; and it is, in reality, an hypothetical assertion. For it declares that, if there should be, at any time, a triangle and a parallelogram, constructed in the manner stated, the area of the one would be one-half of the area of the other.

These remarks throw light on the nature of scientific truth and of theoretical knowledge; they show that *every general principle is really an abbreviated hypothetical assertion*, in which the subject (that is the true logical subject) sets forth an antecedent, while the predicate sets forth the consequent. They point also to the truth that the ultimate law of all reasoning is not Aristotle's Dictum, nor any principle of Identity, or of Inclusion, or of Contradiction, but the law of *Reason*

and Consequent, or—as Leibnitz named it—the law of the *Sufficient Reason*. And they make it clear that this principle pertains to the connection of one fact with another, that is, to the connection of one case of existence, or of non-existence, real or supposed, with another case of existence or of non-existence.

THE DOCTRINE OF THIS ESSAY ONLY RUDIMENTARY.

14. We have now presented a few thoughts respecting the nature and laws of conviction, in the hope that they may serve as starting-points of investigation and discussion. Of course a consideration of the many questions relating to the complicated phenomena of belief, would be the work, not of an essay, but of a treatise. We shall therefore close the present discourse with two remarks.

And, first, it is only proper to admit that *the tendency of the principles, which have now been advocated, is in favor of that style of philosophy which is called Intuitionalism.* The Sensationalist and Associationalist systems, in which Materialism takes theoretic shape, seem incapable of making any true distinction between belief and thought, nor can they account for such subtle conceptions as those of existence and non-existence. Neither can they give any reasonable explanation of those convictions in which a distant reality is inferred as connected with a present fact, or of those conclusions which we form respecting objects which never have existed and never shall exist. Evolutionists labor in vain to account for phenomena like these. They cannot even explain the simplest act of memory by the interaction of their insensate molecules.

On the other hand, Kantianism, and that Idealistic philosophy which some, of late years, have adopted as the proper antithesis of Materialism, are wholly unsatisfactory as theories of belief. For any true doctrine of conviction must be of an actualistic character. It must recognize a judgment which asserts that things are, or are not, as men commonly believe them to be, or not to be; and must distinguish hypothetical judgment as only a preparation for this real perception of things. Kantianism asserts no truly objectual reality, nor is it capable of doing so. It cannot even give a fair account of hypothetical

belief. It has nothing out of which to construct convictions save conceptions and sensibilities. Conceptions and sensibilities, of themselves, can produce nothing but dreams. We do not deny that scholastic ingenuity might devise some temporary combination between doctrines that are naturally unrelated, but we are convinced that a satisfactory theory of conviction is possible for those only who accept the unpretending philosophy of Common Sense.

IT CALLS FOR A RECONSTRUCTION OF THE SCIENCE OF LOGIC.

Our remaining remark *relates to the study of Logic.* This science, as it now stands, is a compound of strength and weakness. It has the merits, and it has the defects, of a system whose practical rules have been tested and found reliable, yet whose radical principles are undetermined and disputed. For scarcely two logicians are agreed as to the fundamental laws of conviction. All claim connection with Aristotle, but only in a very loose way. They praise his logical writings, but exclude from their approval the metaphysical references and explanations contained in them. In this they act wisely. Then they entirely reject those "modal" syllogisms, *to which the major part of Aristotle's chapters are devoted,* and in which he discusses inferences in possibility, necessity, and contingency. And, even while accepting his "pure categorical" syllogism, they differ greatly as to the value of that. Some make it the essential form of all reasoning; others only a form to which all reasoning may be reduced; while others contend that there are modes of reasoning to which it cannot be applied at all. Most say that logic considers only demonstrative, or necessary, inference, but some that it is "the calculus of inference, necessary and probable." Moreover, while they all profess to set forth the very first principles of belief, their teachings are often hard to understand and yet harder to accept.

Such a state of affairs can arise only from a want of clear initial perceptions. Eminent authorities define logic as "the science of the laws of thought—of thought as thought." This, evidently, is a mistake. Logic is the science of Rational Conviction, and *considers thought only so far as it is the instrument and vehicle of conviction.* In other words, logic is an objective

science, and deals with modes of thought only as these may relate to fact and be attended with belief. Such being the case, the logician should carefully distinguish thought and belief, and should then endeavor to determine exactly what modes of thought are accompanied by conviction, and under what conditions this takes place in a correct and trustworthy manner. Nor should we seek to understand the laws of one mode of conviction only, but those of every mode and of every degree. Only after such a beginning can we hope for satisfactory progress. For ourselves we look for a better logic than any that has yet appeared. Modern authors have retained the most valuable rules of the ancient dialectics, and have admirably elucidated the methods of inductive investigation. But a deeper work is needed, which shall satisfy our enquiry for fundamental principles, and which shall explain, more philosophically than has yet been done, those inferences in possibility and in probability, which constitute nine-tenths of the reasonings of every human being.

FRANCIS NEWMAN: "After stripping off all that goes beyond the mark of sober and cautious thought, there remain in this world fitnesses innumerable on the largest and smallest scale, in which alike common sense and uncommon sense see design, and the only mode of evading this belief is by carrying out the cumbrous Epicurean argument to a length of which Epicurus could not dream. We cannot prove, we are told, that the eye was intended to see, or the hand to grasp, or the fingers to work delicately. Of course we cannot. But what is the alternative? To believe that it came about by blind chance. No science has any calculus or apparatus to decide between the two theories. Common sense, not science, has to decide, and the most accomplished physical student has in the decision no advantage whatever over a simple but thoughtful man."

PHILOSOPHICAL TOPICS AND THE PULPIT.

[A Lecture delivered before the Summer School of Christian Philosophy, 22d August, 1884, at Richfield Springs.]

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THE title of the organization here represented, "The American Institute of Christian Philosophy," is indicative of its general purpose, *i. e.*, the discussion of philosophical topics having more or less relation to the Christian faith. A wide latitude is avowedly given, and the range of topics is not strictly kept within the limits indicated. But the general purpose is clear. And it implies and suggests not only that a true philosophy is consistent with the Christian religion, but that between the two there is a close and vital relation. As the pulpit is the place where Christianity gets its most constant and conspicuous official public expression, the question occurs whether the philosophy that underlies all our thinking and that does so much to shape it, is to make itself heard in the discussion of philosophical topics in the pulpit; or whether that philosophy is simply to be a background upon which all our preaching is set. Are the discussions of this School to be carried on in the assemblies met on the Sabbath for Christian worship; or are only the results of these discussions to be seen there, and these results in the treatment of only those doctrinal and ethical themes that clearly lie imbedded in the Scriptures? Amidst the questions asked in this Summer School, and to which it is sought to give answers that shall commend themselves alike to the judgment of reason and to the demands of faith, it has seemed to me that this question of the relation of philosophical topics to the pulpit might be fitly placed. And to this question I now invite a half-hours's attention.

That the average preacher has given little time and less real attention to philosophy, and has therefore no very clear concep-

tions of any philosophical system, and no definite philosophical convictions, is no valid reason against the pulpit presentation of philosophical topics. If they *ought* to be presented in the pulpit, then the preacher's ignorance of them is a reason why *he* should not be presented there, not why philosophical topics should not be. If they belong to the pulpit, then some knowledge of them is a part of every gospel minister's mental furniture. The plea of ignorance as a reason for not handling such themes is estopped by the very acceptance of the ministerial office. It is not an excuse, but a condemnation.

Again: that the average congregation does not understand the fine distinctions and subtle processes, and is unfamiliar with the nomenclature of philosophy, is no valid reason against the pulpit presentation of philosophical topics. If they *ought* to come before the congregation, if they are a part of the truth to be preached, the *cui bono* challenge gets its answer in that necessity. The congregation must be made to understand them, at any cost. It should be the unceasing toil of the preacher to lift his hearers to a level of philosophic comprehension. A classmate of mine in the Seminary was criticised for using "subjective" and "objective" in his sermon, on the ground that the people would not understand these terms. Feeling persuaded of their necessity as conveying right and wise distinctions, his reply was, "But they *shall* understand them," *i. e.*, he would see to it that they were made to understand. Because a topic is hard to be understood is clearly no reason for barring it out of the pulpit. That would rule out a great many fundamental truths in theology. It would have left Paul virtually dumb.

On the other hand, that a true philosophy lies at the base of a true theology is no valid reason in favor of the pulpit presentation of philosophical topics. Underneath every theological system lies some kind of philosophy, whether or not it be clearly defined in the consciousness of the one holding the system. Philosophy and theology have an intimate and vital relation. To twist Prof. Bowen's thought about, dogmatism is as much a speculation and a nullity as scepticism, if it does not rest on a philosophical basis. And the study of philosophy cannot be pursued at any great length and with any moral earnestness without

arriving at some definite convictions respecting the fundamental truths of theology. But if this were to justify the introduction and discussion of philosophic themes in the sacred desk, then a preacher might as well take for his text, "Behold," or "Wherefore," as anything else, and go thundering away on topics lying in a good many other fields than philosophy.

Philosophy unquestionably has a marked and often absolutely determining influence in theology, shaping convictions and moulding beliefs and deciding actions. But this is no valid reason why philosophical topics should be taken into the pulpit. It is an overmastering reason why the preacher should be sure of his philosophy. One need not be very wide or deep in philosophical research to see how inevitably a man's thinking and preaching are affected by his philosophical views, and in what potent and often pernicious way his philosophy deals with his theological concepts.

We cannot escape the inevitable. Philosophy of some sort every thinking man will have. It is a necessity of human nature. Popular modern thought has given it immense sweep, from the philosophy of the unconditioned soaring among the infinities to the philosophy of the brigade of bread aud butter. But let us limit ourselves to the stricter definition that confines philosophy to the treatment of knowledge as knowledge, apart from the objects known, embracing as its essential and fundamental themes for discussion the origin, the conditions, the limits, the principles and the certainty of human knowledge. Take now, of these, that age-long question as to the origin of knowledge, and it may be unhesitatingly affirmed that from one's view of this may be determined "the leading features of his whole creed in science, philosophy and religion."

Take the innate idea of God in the human soul. Left to itself, fetich worship is likely to be its product. Developed only by pure reasoning, and in such a man as Spinoza, to whom Leibnitz refers as "that intellectual machine for grinding out syllogisms," pantheism is the outcome, a God without personality, *aliquid immensum infinitumque.* Developed exclusively by experience and inductive reasoning, and we are likely to reach a God of human passions inspiring fanaticism.

Locke's theory of knowledge accepted, and God must be found out by the methods of the empiric alone. The preacher that ridicules metaphysics as "a mediæval jargon of words" is logically on the road to the positivism of Comte. Theologians have founded religion in the feelings, and thus have not only promoted an irrational mysticism, but virtually surrendered the whole ground to the agnostic. Others have so exalted God's will as to make the divine fiat the base of all distinction between right and wrong, thus giving ground for the atheistic charge that "theism makes a capricious will supreme." A necessitarian lands logically in materialism, and man becomes "a puppet that moves according as its strings are pulled."

By way of illustration of the influence of philosophy in theology, Schleiermacher may be cited. Though leaning to Spinoza, he was no pantheist. He fairly turned the tide of rationalism in Germany. But he was intensely subjective. And he built his theology so exclusively on consciousness that it lacked some very vital elements of positiveness. Feeling, with him, was a stronger reality than speculation. His philosophy flamed up everywhere in his preaching, and its profoundly shaping influence may be traced in the preaching and work of such men as Müller, Dorner, Vinet, Maurice, F. W. Robertson, and Bushnell, who have drunk more or less deeply at this fountain.

Hence the necessity of a true philosophy. True or false, it will inevitably strike up into the pulpit. It will permeate and color preaching.

And here let us mark the distinction between philosophy in the pulpit, and philosophical topics in the pulpit. The former is unavoidable, and not under debate. There is a philosophy of the atonement; though none, to my mind, that covers it. There is the philosophy of God in the Gospel, the philosophy of the plan of salvation. There is a philosophy back of these, underneath them, comprehensive of all those profound depths and immeasurable breadths within the range of human thought, embracing the reality and limits of human knowledge, the laws of thought, the basis of moral distinctions, the freedom of the will, the distinction of spirit and matter, of the personal and the impersonal. Questions concerning these things are asked. They must be

answered. How we answer will determine how we preach. In other words, our philosophy will give tone to our pulpit.

But *philosophical topics*—shall *they* go into the pulpit; *e. g.*, "the philosophical basis of theism"—shall that go in? The power of contrary choice—shall that go in? The capacity of man to know God, the reality of human knowledge, the basis of personality—shall these go in?

Three things, fairly considered, may help us to true limitation in this matter of pulpit topics, viz.: the preacher's *position*, *commission*, and *aim*.

His position is that of an official messenger. He is called in the Word of God, κηρυξ, a herald, a proclaimer. The herald does not create his message, he delivers it. He is the medium by which it is transmitted. It is his to explain the message, to render its true meaning, to illustrate and enforce it; but it is utterly beyond his province to add to, or to take from, the message with which he has been entrusted. The preacher is God's herald, and as such he has God's message to deliver—neither more nor less.

The *preacher's commission*. It is found in these words: "Go ye, make disciples of all nations, teaching them to observe all things whatsoever I have commanded you." And again: "Go ye into all the world and preach the Gospel to every creature." Paul charged Timothy, in full view of, and in exact accordance with, his own divine commission, to preach the Word, *i. e.*, the Word of God, the message which God would have all His appointed and anointed heralds proclaim. It was this that whole cities "came out to hear," that "mightily grew and prevailed," that was "not bound," that was "quick and powerful," and which, as a two-edged sword, cleft asunder the souls and spirits of men, and by which those early preachers went "everywhere triumphing in Christ Jesus"—this God-breathed Word, spoken by holy men of old as they were moved by the Holy Ghost; by prophet and apostle and Jesus, who Himself embraced in His own person the totality of the Word, being the living eternal *Logos* that was with God and was God. The exact limit of this Word is "all Scripture," profitable for doctrine, for reproof, for correction, for instruction in righteousness, that

the man of God may be complete, furnished completely unto every good work.

Here is the preacher's commission. This is his message and his only message. He is to "hold forth the Word of life," of salvation, of God. The word of science is not that. The word of history is not that. The word of philosophy is not that. These may illustrate and explain the word of life; they may give concrete form to the abstract truth as it is in the Scriptures: but to make these the message is transcending the right of a herald, and not preaching the preaching divinely bidden.

The *preacher's aim.* It is salvation in the broad, deep-meaning sense. He constructs a sermon that he may reconstruct a man. He is a seeker of men and a builder of men; bent solely on rescue work and structural work. He is to reach and find his man, and then build him up in Christ. Christ gave Himself for the Church that He might present it to Himself, a glorious Church, without spot or wrinkle, or any such thing. For the consummation of this single purpose God calls men to the ministry. Or, as the apostle puts it, "For the sake of perfecting the saints, Christ appoints evangelists, pastors, and teachers to the work of the ministry—to the edification of His body;" or as the Confession of Faith puts it, "for the gathering and perfecting of the saints in this life to the end of the world." This has one possible way of accomplishment and only one—by *the truth of God* as *accompanied by the Holy Ghost.* The Holy Spirit convicts and converts and transforms men only by the truth, and not as it is in Socrates, or Plato, or the stars, or the philosophies, or the sciences, or the arts, but *as it is in Jesus.*

If this, then, be the position, the commission and the aim of the preacher, if he be simply a herald of God, delivering a given message, in order to salvation, it follows that the Scriptures *furnish the only legitimate themes of pulpit discourse.* The ambassador must look to his instructions and implicitly follow them. The herald must proclaim his message, neither more nor less. If God has provided a word for the preacher, and said, "*Preach this Word,*" there is just this to preach. To add to it or take from it, to find topics outside the Word for pulpit discourse, is certainly to transcend his office and violate his commission and

expose himself to the divine displeasure, divesting himself of his high and sacred function as an ambassador of Christ. Inspired truth given of God for salvation is the basis and substance of all pulpit utterance. Interpretation must lie at the bottom of all address "which aims at bringing the Kingdom of God in its spiritual power and supernatural claims to bear upon the minds of men." Topics not lodged in any part of Scripture may be profitable for discussion and meditation; their consideration and enforcement may tend to sound thinking, social elevation, better morals, a higher power, richer civilization; and they should have thorough treatment, and doubtless often by Christian ministers, in essays and reviews and criticisms, in books and clubs and associations, but not in sermons with Word of God for their text. For then the text is a mere pretext; a figure-head and a false one; the sacred sign with nothing signified. Putting a steeple on the theatre does not make the theatre a church; making the hand as the hairy hand of Esau does not change Jacob's voice.

From these general principles and facts we get, as it seems to me, three conclusive points against the presentation as a rule of philosophic topics in the pulpit.

The first is *the contents of the Word.* These fix the limit of pulpit topics. What is within this range we are to preach. Philosophical topics lie almost exclusively outside this range. They are therefore barred out of the pulpit. "Canst thou by searching find out God," is a text that would justify a discussion, in the pulpit, of the limits of human knowledge. But you must twist and torture the Scripture in almost every instance, tear it bleeding from the context, vacate it of the mind of the Spirit, and possess it with your own mind; show the door to exegesis and call in *eis*egesis, before your search will yield a philosophical topic; and then your sermon, if by courtesy it might be called a sermon, would justify this talk of two hearers as they passed out of Church: "That sermon ought never to have been married to that text," said one. "Why not?" said the other, "there's no blood relation between them."

If it be contended that philosophical topics stand vitally related to Christian truth; are implied and suggested and taken for granted in Scripture; are God's great thoughts writ in the

very structure of the soul, and should therefore have place in the pulpit, the sufficient answer is that God's great thoughts are in the rocks, the stars, the flora, the soils, everywhere; but this is hardly a reason for presenting geological, astronomical, botanical, agricultural and like topics in the pulpit. Some of these have vital relations to Christian truth, but we are not commanded to preach them.

Mrs. Browning says:

> " Earth's crammed with heaven,
> And every common bush afire with God;
> But only he who sees, takes off his shoes;
> The rest sit round it and pluck blackberries."

This is beautiful poetic thought and beautiful Christian sentiment, but it furnishes no reason why we should go into the pulpit and preach on vegetation. There are " tongues in trees " and " books in the running brooks," but there are no " sermons in stones," Shakspeare to the contrary notwithstanding. Sermons have *Word of God* for their base and source. The Bible, and the Bible alone, is at once the source and the test of all the matter of preaching. The matter of preaching is the whole Faith, Scripture is exhibitive of the whole Faith, and " Christ is the water-mark in every page."

Then again, if we are to get topics by implication and indirection, and to be led about by the subtle laws of association and relative suggestion, we all know what Will-o'-the-wisps, we shall be put in chase of. " Christmas has thus been taken advantage of to connect the sad story of the child born in a manger with the most approved methods of raising cattle; and the appearance of Jesus walking in the garden at the break of day on Easter morning, with the benefit of rising early and taking a walk before breakfast; " and Christ's tears over Jerusalem, with the relative advantages of city and country life.

The second point suggested in support of the rule that philosophical topics should not go into the pulpit is *the nature of preaching.*

That which is essential, which all the discourses of the Bible have in common, and which our sermons should also have in common with them, is that they proclaim the will of God.

Doing this out of, and according to, the Scriptures, is preaching. The pulpit, therefore, is not an academical chair; and the church is not a philosopher's lecture-room. Preaching is the direct inculcation and application of truth. A character of *urgency* should dominate in it. I do not mean by this that it is to be simply a cry of alarm. Far from it. But it is not a study, a contemplation, a discussion by eminence. Its fundamental specialty is persuasion. The sermon is nothing if it do not bear on *the will* to move it God-ward. Nor do I mean that preaching is to be narrow in its range of resource; that there is to be no familiarity with philosophic and scientific thought. Less study, less broad, less deep, less prolonged study, would vitalize no pulpit and make no preaching more effective. A weak mind remedies nothing. What Coleridge said of the great divines of the seventeenth century, it should be possible to say of these who preach to-day: "They were not ashamed of the learned discipline to which they had submitted their minds under Aristotle and Tully, but brought the purified products as sacrificial gifts to Christ. They baptized the logic and manly rhetoric of ancient Greece. They made incursions into every province of learning and returned laden with the choicest plunder. The scheme of the philosopher, the narrative of the historian; the vision of the poet were all rendered subservient to the one predominant object of their researches; the gold of idolatrous shrines was transmuted into a purer ore by their spiritual alchemy." When philosophical discipline and ripe scholarship are thus consecrated, they are elements of tremendous power.

But what I mean is that preaching is the direct, bold, urgent, oratorical presentation of the truth of God. What I mean is that every whipster in theology and smatterer in science or philosophy is not to rush into the pulpit fresh from some book or review article, to demolish Huxley or Tyndall or Mill. What I mean is that the sanctuary is not to be turned into an arena of *ex parte* debate; that men do not come to the house of God to be fed on the refutation of sceptics; that not at the flock within the fold is the minister to cast "the bristling missiles that ought to be hurled at the wolves without"; that the apolo-

getic and the conflict-reconciliation business, as a pulpit business, has been greatly overdone; that, as Hervey says, "Very young preachers and very old ones (the former by tilting against the day-flies of heresy, the latter by caning the bleached skeletons of unbelief) are too apt to smell the battle afar off." What I mean is that preaching has such a character of urgency and is so much a proclamation of will to will that it seems the very climax of absurdity for a minister to enter the pulpit and undertake there to lay philosophical foundations for his hearers' primary beliefs. For example, Harris says in "Philosophical Basis of Theism," page 3, man "cannot inquire respecting the personality of God till, by studying the constitution of man, he has found out that man is a person." Now imagine a preacher, on the plea of furnishing a basis for intelligent belief in God and His personality, coming before his congregation and saying, "My dear hearer, I am come this morning to prove to you that you are a person!"

Yet the preacher should do just that thing, if philosophical topics are to be at home in the pulpit, for that is the very bottom idea in philosophy; and if you are going to lay the philosophic foundations of a stable faith, you must begin there. That needs to be proved in the pulpit *just as much* as the existence and personality of God, or the immortality of the soul—*just as much!*

The third point suggested against the ordinary presentation of philosophical topics in the pulpit is *Divine and apostolic example.* Upon this I need not dwell. The discourses of Christ and His disciples are open to search. They were not forever establishing our primary beliefs. They were *never* doing it. Jesus took things for granted in the repose of sublimest confidence. He appealed to conscience and consciousness. He was not all the while proving things. Unbelief of spirit and of immortality was *organized* in the very bosom of the Jewish Church, keen, subtle, bold; commanding the intellectual elements of society and the best minds of the nation; yet do we ever find Jesus undertaking to prove that man has a soul and that his soul is immortal? What an argument He might have left the Church, if there is an argument! But He startled men's sordid

natures and woke their dead consciences with the tremendous question, "What shall it profit a man if he gain the whole world and lose his own soul?" He preached God and immortality. He did not demonstrate them. He left us Christianity. And to-day Christianity is its own best evidence. To exhibit is to demonstrate. Christianity's exhibition is immortality's proof. Outside of Christianity, or the Word of God, there is not the shadow of a shade of *proof* that death does not end all.

One question now: Does the history of the Church tend to vindicate the rule we have sought to establish that philosophical topics should not be presented in the pulpit? Beyond a doubt. Ecclesiastical record and homiletic literature are all one way. Through the first five centuries the Scriptures continued to be regarded as the true and only basis of preaching, and *interpretation* lay at the bottom of all pulpit address. Chrysostom, of this period, was familiar with the false philosophies of his age, but "It was the conscience of man, not his opinions, that he addressed." He elevated the Gospel above philosophy, and was "Pauline in his bare, towering, sublime spirituality." Augustine was polemic enough and philosophic enough, but in his sermons "he stood face to face with the soul, and had a tone of intense reality." Luther is another instance of the preacher who draws his strength from the Word. He became mighty in the Scriptures, and his great work was chiefly carried forward by his preaching. The Word of God, not of philosophy, was the irresistible sword with which, in his sermons, he conquered all opposition. Edward was mighty in the pulpit; and he could go to profound depths in the discussion of philosophical questions. But look over a list of his sermons and you will find his power in the pulpit did not come from taking philosophical topics there. Nor did Calvin's. He ruled Geneva from his pulpit, but because his preaching was weighty with biblical truth and burning with an intense purpose.

On the other hand, where the pulpit has given itself to philosophical themes, the speculative spirit has grown rife and rationalism has at last run mad, and topics of all sorts, of four-footed beasts and every creeping thing, have crowded out God's topics of sin and redemption. The condition in France prior to the

awakening in the early part of this century is in proof. Half tints had displaced vivid coloring, regeneration had become chiefly a reformation of morals and a construction of character, and Jesus Christ had become "a veritable outwork," until the Word of God began to abound in pulpits where it had before only descended in drops; and the doctrine of the Holy Spirit was reinstated, imparting substance to the words *regeneration* and *conversion*, so long unmeaning and dead.

See what impressive illustration Germany furnishes of illuminating theologians so bent on rendering everything, even the profoundest mysteries of the Gospel, so clear to reason and so based in philosophic truth that nothing is left but pure rationalism. Look at England in the reign of George III., when the celebrated Blackstone could say that he had gone diligently through the London churches, and "did not hear a single discourse which had more Christianity in it than the writings of Cicero, and that it would have been impossible for him to discover, from what he heard, whether the preacher was a follower of Confucius, of Mohammed, or of Christ."

But I need say no more. My argument is that philosophy, like psychology and geology and astronomy and chemistry may supply our sermons with substance, but almost never with subjects; that philosophy may pervade our sermons, but not dictate their themes. I would exalt philosophy, but insist on its rightful province as underlying and illumining the Word, not as a usurping substitute for the Word. My plea has been for the general exclusion of philosophical topics from the pulpit, but it covers the whole field of secularity as opposed to that for which can be found a "Thus saith the Lord." Christianity is not strengthened but weakened, as a *social* and *civilizing* power even, to say nothing of its loss in regenerating power and spiritual aggressiveness, just as secularity characterizes its pulpit ministrations; and preachers get to wearing the mantle of Socrates, or Plato, or Cicero, instead of that of Christ. Christianity gets its grand leverage from man's need as a sinner, his deep and urgent need of God and redemption, and from Christianity's power as a salvation, and the leverage is gone just as this need and this power are lost sight of in secular themes.

GREAT BELIEVERS.

[A Paper read before the American Institute of Christian Philosophy, October 2d, 1884.]

By Charles S. Stockton, M.D., Newark, N. J.

THERE is a systematic effort being made, on the part of certain infidel lecturers upon the platform, to exalt unbelieving men into a position of recognized greatness, because of their antagonism to Christianity. By dogmatism and fulsome eulogy these men are to be foisted upon the approbation of the public. Some of them may, indeed, be well described as remarkable men, but very few of them would rank in the order of geniuses. They have been men of brilliant parts, saying sharp and smart things, abounding more in witticisms than in philosophical depth of thought; second-rate men rather than first-rate; men whose influence seemed to be vast and immediate, but who left behind them no lasting impression upon the ages. They were destructive in their work rather than constructive—tearers-down rather than builders-up. Their work was entirely one of criticism and negation, rather than any original contribution. It does not take a mind of very high order to stand by the very greatest work and discover imperfections in it. Such men could stand beneath the sphinx and the pyramids, beneath the cathedral of Cologne and St. Peter's in Rome, squinting at these great structures through their little microscopical eye-glasses, and superciliously passing judgment upon them, when, of themselves, they could not lay one stone straight above the other, or erect the smallest minaret or spire. So Carlyle, after referring to the critical work of Voltaire, cries out: "But what next? Wilt thou help us to embody the divine spirit of that religion in a new Mythus, in a new vehicle and vesture, that our souls, otherwise too like perishing, may live? What! thou hast no faculty in that kind? Only a torch for burning, no hammer for building? Take our thanks then, and—thyself away."

It might be well to inquire whether there is anything in the fact of unbelief, in itself, to constitute, irrespective of other considerations, a title to greatness. The belief in a God is one of the oldest beliefs of the human race—the most venerable tradition of mankind. It has come down to us through a long succession of generations, through the convictions and experiences of countless thousands of men, whose minds it has satisfied, whose hopes it has raised, whose hearts it has cheered and sustained in the midst of toil and sorrow, whose lives it has lifted from inaction and despair to activity and courage. All this, it may be said, does not furnish a reason why we should receive it to-day. But it certainly proves that there must be some deep reason and substance of truth in the belief, which ought to bar out any hasty, off-hand decisions against it. He, indeed, must be an arrant egotist, who puts up his individual dictum and judgment against the verdict of the wisest and gravest men in all history, and he must be a veritable Don Quixote of scepticism, who imagines that the product of the thought of ages is to be overthrown by the shock of his doughty lance. Who can tell whether it is more reasonable to accept a proposition, or to reject it, until it is examined on which side lies the greater evidence? He is credulous and superstitious who believes where the fewer reasons are, and he is the liberal and advanced man who goes only with the preponderance of logic. Infidels are fond of using the epithets "credulous" and "superstitious" to characterize those who hold to the Christian faith, but until they show that they have more arguments on their side than there are on the other, the adjectives more properly belong to themselves. To any other but himself, the belief of the atheist must ever seem wilder and more unsubstantiated and more unnatural than the most fantastic fables of the Arabian Nights.

There is a fundamental unreasonableness in atheism, which can never be eliminated. In vain does this school of philosophers endeavor to account for man and the universe without a sufficient Force for their creation. Every effect must have a cause. Go as far back in the line of nature's march as you please—back to protoplasm and the *amœbæ*—back to star-dust and diffused cos-

mical light—back to the first primordial atom, and still you are not rid of the necessity of some originating and powerful First Great Cause, to start into motion and maintain and guide this great world in all its manifold complexity. And when atheists transport us, in imagination, to those dim and nebulous times, and bid us gaze upon zero and a wall of blackness, our faith may well be excused, if it rather perceives a wall of light, through whose archway issue the blazing chariots of God! So that, to my mind, atheism is not a proof *per se* of great brain-power, but, as far as it goes, evidence of the opposite. Men may prove themselves possessed of brains by their acquisitions in science and philosophy and literature, but if they are atheists, their atheism does not constitute an additional element in our esteem of their intelligence.

> "The owlet atheism,
> Sailing on obscure wings across the noon,
> Droops his blue-fringed lids and shuts them close;
> And blinking at the glorious sun in heaven,
> Hoots out: 'Where is it?'"

From all the boasting that we are continually hearing of the greatness of infidels and their numbers, one would think that the intellectual heavens of the past would be all ablaze with the crowded galaxy of eminent atheists. But, as a matter of fact, they are few and far between. It may be, that it is because there have been only a small minority of men who could do such violence to their reasoning powers as to commit intellectual suicide. Most men have found themselves absolutely unable to accept what every instinct and every conclusion of reasoning repudiated. And, it may be, that the few atheists in the country are lifted into an artificial prominence and notoriety, because of their very sparsity and isolation, because of their peculiarity, by which they stand out from the rest of the community and arraign the sentiments of all their neighbors. Many a small, narrow and bigoted man, with little education and native ability, has been largely talked about and referred to with considerable deference, because, forsooth, he said he had too large a brain to take up with the dogmas of the Church when, if he had belonged to the Church, lost in the crowd, he would have

been one of the least in the kingdom of heaven. Infidels, too, are not noted for excessive modesty, and their arrogance, their superciliousness, assumptions and zeal in controversy have given an impression of a greater strength than they really possess. And atheists have not been scrupulous as to their methods of enumeration, when they wanted to count their hosts, but have added in, as if they were absolute deniers of God, every one who ever resented undue ecclesiasticism, every one who ever broke with the Church, every sceptical person who was not able to be as dogmatic as his fellows, every agnostic who simply refused to affirm on either side.

It is my purpose to show that the greatest proportion of the great men of the world—the truly original and influential thinkers and actors, have been reverent, God-believing and God-fearing. It would be too large a task to do this exhaustively. It would demand that we should refer to nearly every individual in the long train of distinguished men. All that can be permitted is to glance at some of the foremost and best-known names. It may be said that even this would not prove Christianity true—that these men might be mistaken. Granted; but it at least proves as much as citations upon the other side, where they are made so abundantly, with the purpose of influencing young men and immature minds, unaccustomed to reflection and the detection of fallacies. Certainly, when we see the noblest and wisest of the earth paying their homage to the doctrines of the Bible, it creates something of a presumption in their favor, and we need not feel ashamed to be found kneeling in their company.

Let us examine, first, then, the ranks of the *philosophers* and see if we can discover there numerous great infidels, among those who have sent their plummets down deep into the abysses of the human mind and soul.

It is commonly taken for granted that Christianity and philosophy are something apart from one another and perhaps antagonistic. But Christianity *is* a philosophy. It takes as deep reflection, at least, to say of it, "I accept it," as to say, "I deny it." Many an old saint, of deficient education perhaps, living on the frontiers of civilization, has her belief as well as does Mr. Spencer—her cosmology, her theory of the universe, her

conceptions of the purpose and destiny of all things. The religious founders of the world, Moses, Buddha, Zoroaster, Mohammed and Jesus, have all been profound philosophers, gazing with deep scrutiny into the face of the Sphinx of the universe. St. Luke was as philosophic a historian as Josephus, and the religious instinct has always awakened in men a deep ambition to know the mystery of themselves and of the world.

Go to Bacon, therefore, the founder of our modern scientific method, and inquire of him whether he is one of those great infidels that we are seeking to discover, and you will hear him declaring that "A little learning disposeth to atheism, but greater depths in philosophy bringeth the soul back to belief." Go to Locke, and ask of him whether it is in him to make a witty and profane mockery of holy things, and you will find him manfully asserting his indebtedness to the Bible, "which," says he, "has revealed unto me many a truth, the manner of which my poor reason can in no way make out." Go to Hegel, one of the greatest of the Germans, and the leader of a great school of modern thought, and, so far from lighting upon a famous atheist, you will see him taking the fundamental conceptions of Christianity as the starting-points in his philosophical system and the constant criterion of his truth. Go to Kant, who worked a complete revolution in the domain of philosophy, and, behold, he declares it to be the chief end of his thought and of his life, to present arguments in proof of the being of a God. Whether he shall succeed or not, whether, in all points, we can call him orthodox or not, his effort shows his belief, and the greatest of modern thinkers is lifted out of the ranks of denial. Go to Dr. Berkeley, and to all the school of the idealists, and you will not find them bowing their knees to matter as their God, but rather seeing, in matter, only a special manifestation of spirit: for them, the round earth is but an object-lesson from the Creator, the constellations blazing hieroglyphics, spelling out God's name; the scroll of the heavens a brilliant, but unreal, phantasmagoria, behind which is the Great Reality. Go to Dr. Johnson, that Titan among English sages and litterateurs, and we find him declaring that, though man had the milky way for a sceptre and all the galaxy of stars for a crown, he would not be happy

without Christianity. And, on his death-bed, he refused all opiates, saying that he desired to present his soul unclouded before his God. Surely, when such a powerful man as he does not disdain to kneel before the great Mystery which surrounds us, lesser intellects may well follow. Go to Franklin, the great American sage and patriot. Will you find him among the ribald crowd of blasphemers? In his youth he was a deist, but, being outrageously defrauded by one of its disciples, he came to the conclusion that deism did not have utility on its side. So far was he from countenancing and endorsing attacks upon Christianity, that, when Thomas Paine sent him the proof-sheets of "The Age of Reason" for examination and criticism, he returned it with this endorsement: "I beseech you to destroy this book, for if men are so bad with religion, what would they be without it?" Go to Newton, whose imperishable name looms gigantic in the annals of science and philosophy, and interrogate him as to whether he can believe or not. We see him—this Columbus of the skies—as he spreads his sails to navigate the broad ether, mooring his bark now to the moon, and then steering boldly for far distant planets and satellites, touching even the fixed stars and the outermost rim of space in his sublime course. And, as he returns once more to earth, we can imagine him surrounded by an eager and curious throng, in whose hearts there throbs only one emotion—on whose lips there trembles only one all-important question: "O thou who hast discovered the secrets of hoary space, thou who hast rounded great heaven's mighty cape, thou who hast passed the pillars of Hercules, thou who hast safely buffeted with the billows of immensity—tell us—tell us—what tidings hast thou brought? Hast thou in all thy voyage found a God or not?"

And as he lifts himself to reply, what answer falls from his lips? Not the dismal language of the denier or the agnostic! He builds no altar to some foolish goddess of chance, but, entering into the temple of the true Jehovah, he lays down the spoils of his celestial expedition, and then, raising himself, he proclaims that all the universe has but one voice—that sun and planet and moons and comets and stars, and nebulæ, all join in one magnificent anthem: Hallelujah! the Lord God omnipotent reigneth!

Let us turn our attention, now, to the great *historians* of the world, and ask if they are willing to characterize religion as a delusion, and God as a nonentity. There is a deep reason why unbelief should affect historical conceptions most potently. Either history has been the record of a superintending Providence in the affairs of men, or it has not. The first view gives us a definite Power with a clear purpose and an intelligible and coherent plan running through the ages.

> "Careless *seems* the Great Avenger; History's pages but record
> One death struggle in the darkness 'twixt false systems and the Word;
> Truth forever on the scaffold, wrong forever on the throne;
> But that scaffold sways the future, and behind the dim Unknown
> Standeth God within the shadow, keeping watch above His own."

The other view can only give us history as a disconnected series of events, a mighty maze without a plan, proceeding from no author, bound together and harmonized by no controlling thought. Mr. Hume started out to write history with a definite purpose to exclude as impossible every narrative of the supernatural or miraculous. And this prejudice so warped his mind, that to-day, his historical judgment and accuracy are seriously impaired.

Will you find your great infidel historian in the erudite Bunsen, of cosmopolitan learning, whose whole aim throughout his writings was to establish the proposition of a God in history, guiding and controlling events for his own glory and for the furtherance of His kingdom? Will you find him in Guizot, the distinguished statesman of France, who, in his great "History of Civilization," presents the influence of the Church as the foremost factor? Neither will you find him in the great Grotius, nor in Macauley, nor in Greene, who declares the time has come for the recognition of moral and spiritual, as well as martial forces in history—for recognizing the tremendous influence of the Wesleyan revival as well as of the wars of the roses.

Direct your thought now to the great *discoverers* of the world, and see if humanity has been much indebted for its knowledge of the earth and men and commerce to any celebrated atheist. There are three strong incentives to discovery—curiosity, the commercial spirit and the desire to spread the Gospel of Christ;

and, notwithstanding the force of the first two motives, the last has certainly operated more certainly and persistently. If you want to find your great infidel discoverer, it will not do to go to Columbus who gave humanity a new world, for, so devout was he and so engaged in all practices of piety, that it was said of him that he might have been taken for a member of some religious order; his very monogram was a prayer to Christ and the saints. Neither should you go to the brave Raleigh. Nor yet to Livingstone, who, as a missionary, penetrated the wilds of Africa and was as eager to convert men as to find the sources of the Nile. Neither should you go to his intrepid follower, Stanley, who translates the Gospel of Luke to the barbarous king in the centre of the Dark Continent. Go not either to those heroic men of the Arctic Search Expedition, who, dragging themselves over the interminable ice-fields, slowly starving and freezing, regularly consoled themselves by reading the noble and venerable prayers of the English Church, almost the last entry, before death palsied the stiffening hand, being the record of such a religious service!

Direct your attention now to the great *statesmen* and *rulers* of the world, in your search after the famous atheists who have guided the destinies of a great people. Assuredly you will not find such an one in Constantine, the first Christian emperor, nor in Charlemagne, nor in Alfred the Great, nor in Napoleon Bonaparte. England has such a horror of atheism in rulers that she will not tolerate their presence in her councils. The United States never had an infidel President, and the majority of her chief magistrates have been profoundly religious men. Gladstone, the foremost statesman of to-day, has written, like any Bishop, upon the supreme questions of theology—upon doubt and belief—and illustrates in the grandeur of his moral, as well as of his intellectual supremacy, the might of right and the nobility of a conscience swayed by religious ideals. Bismarck the great German premier, the man of blood and iron, whose genius has called the most potent nation of Europe into existence, has his Bible constantly at his desk. Before the battle of Sedan he spent the night in reading it, and, at a recent dinner, declared that he could never understand how man could manage to

endure existence without a belief in God; that, if it were not for that belief supporting him, he would long ago have laid down his burdensome duties, and that his loyalty to his God had made him loyal to his king. Webster once, on being asked what was the greatest thought of his life, answered, after a pause, "My responsibility to God." Look over the great *generals*, from the old Alexanders and Hannibals and Pompeys who never went into battle without consulting the gods, to our modern Wellingtons and Woolseys and Grants and Shermans, and you will find them religious men. Where will you find more splendid specimens of manhood and bravery than in those Christian soldiers, Generals Mitchell and Thomas and Garfield? The body-servant of General Lee said he always knew when there was to be an important engagement by hearing the all-night prayer in his General's guarded tent. It takes more than the blank negations of atheism to imbue men with the spirit of self-sacrifice and infuse them with magnificent bravery. But men are always roused by the battle-cry: "For God and Home and Native Land!"

Thus shall we find that religion has always been the handmaid to patriotism. It needs the elevation of spirit which piety can only bring, for a man to stake fortune and life for the nation —for him to feel truly, as the old Romans used to say, that "it was sweet and decorous for a man to die for his country!" And our own Halleck has struck the same noble strain in his fiery Marco Bozarris:

> "Strike for your *altars* and your fires,
> Strike for the green graves of your sires,
> Strike till the last armed foe expires,
> God and your native land!"

So our Declaration of Independence closes with a solemn appeal to God to judge of the rectitude of its signers' action. Look therefore about you carefully, and discover, if you may, the great atheists among the *patriots* of the world. But go not to John of Barneveld, who, on the scaffold, commended his spirit to God; go not to Cromwell, who addressed his armies in the name of the Eternal, and then led them to battle with the battle-cry, "Let God arise and his enemies be scattered!" Go not to

Hampden and Pym, whose idea was to found a veritable Kingdom of God upon the earth, after the manner of the old Jewish theocracy. Go not to Joan of Arc, the inspired Maid of Orleans, who led France to victory, by her confidence in Jehovah's guidance. Go not to our own Washington, whose farewell address to his soldiers, instinct with the spirit of devotion, has almost the solemnity of a prayer. Go not to the quaint and great-hearted Lincoln, who, summoning the preachers, asked their prayers, saying that he felt like a man wading through the trough of a great sea and needed to be supported on either side.

Come now to the great *lawyers* and *jurists*, in your inquiry for your great infidels—to men who are accustomed to penetrate fallacies, unveil sophistries and sift evidence. If religion were a delusion, Christ an impostor, and Christianity a fraud, these are the men who would make discovery of the fact. But we hear Blackstone declaring, that it would be sufficient to establish the truth of Christianity, simply to give it a common-law trial. We hear Chancellor Kent declaring that blasphemy was not only a great sin against Deity but a crime against society, tending to undermine the security of the nation, which, without religion, would come to anarchy. We hear John Jay, our great Chief Justice, declaring that he had a long life of usefulness to look back upon and an eternity to look forward to.

Direct your steps to the ranks of the great *philanthropists* and inquire among them for your famous infidels. We see Christianity, from its very inception, calling into being hospitals, asylums, alms-houses and orphanages, for the relief of all conditions of suffering, and continuing this work energetically at the present time. Evolution stands by to note calmly the survival of the fittest in the struggle for existence. Christianity goes to work to make something more fit to survive. How few are the colleges which infidelity has founded by its gifts and supported by its endowments. I do not now recall one, except the Girard College. But the Christian Church has dotted this fair land, from Maine to California, with its institutions of learning. From Howard, who, in the interests of humanity, visited all the noisome prisons of England and Europe and died in a pest-house in the far East; from Cobden and Bright, who con-

tended that the people might have bread; from Wilberforce, to whom the slaves of England owe their freedom; from Miss Nightingale, nursing the wounded soldiers in the Crimea; from Peabody, leaving his millions to the poor of London to furnish them homes; from Slater, giving vast sums for the education of the blacks of the South; from Cooper, leaving his splendid Institute behind him as a memorial and a monument; from Dodge who, like a great banyan tree, striking its roots and branches down into new soil till it covers vast tracts, left his influence in America and Europe and Asia—from each of these you would obtain an indignant disclaimer of atheism, and an assertion that religion was the inspiring motive to all their good deeds.

The like testimony would come to you from the eminent *educators* who have impressed their strong individuality upon youth. No atheist certainly was Arnold, of Rugby, who strove to evoke manliness in every one of his pupils; nor Mark Hopkins nor Theodore Woolsey—venerable and distinguished names; nor Dr. McCosh, of Princeton, who, in his nine years there, has so faithfully pleaded with his students that but four students have graduated unbelievers. These are the foremost lights in letters and learning, and they are far—very far—from a vulgar and flippant infidelity.

Where will you next prosecute your search for your great infidels? Will it be in the regions of the *æsthetic?* But infidelity has never produced any worthy art. The beautiful is always wedded to the good and the true. Art itself is a worship of something ideal, far surpassing the real—some entrancing vision of loveliness, having its consummation in the One altogether lovely. If you approach the great world-painters—those whom we gladly call masters—you will find them all reverent men. They love to linger before a canvas whereon they have pictured some tender face of a saint or the Christ or the Madonna; Carlo Dolci made it his practice to paint some figure of Jesus every passion-week. On seeing Donatello's statue of St. Mark a great artist exclaimed, "Such a noble figure as that must have written a Gospel!" Fra Angelico painted as he prayed and prayed as he painted. Now it is upon the sublime statue of a Moses that

Michael Angelo is engaged—now it is upon the awful scenes of the colossal fresco of the "Last Judgment" in St. Peter's. Murillo's heart burns as he depicts the rapturous face of Mary Magdalene gazing upon the Cross. Raphael's spirit is exalted, till it glows like those of Peter, James, and John, as his brush attempts the radiant glories of the "Transfiguration." We feel again something of the sweet experience of the Loving Disciple as we gaze upon the "Last Supper" of Leonardo da Vinci, and a strange awe creeps over us—as it were the very shadows of Calvary—as we look in worshipful silence upon Guido Reni's "Crucifixion."

You will find the same fact exemplified in the history of the famous *architects* of the world. No infidels these! This "frozen music," as it has been called, is not the product of a barren, uninspiring unbelief. It is the world's worship in stone. Before man ever built a shelter for himself, he erected a house for his God, and the first home was sanctified by being only a copy of his rude temple. Such majestic piles as the cathedral of Cologne or St. Paul's in London, or the Kremlin of Moscow, were not erected to blind Fate or blinder Chance, but to the All-seeing One.

Neither will you be able to discover that any of the sublimest *music* of the world owes its source to the impulse of atheism. Atheism robs the universe of its harmony—for it, there is no music of the spheres. It is the creed of despair—its song is a dirge—its appropriate emblem, not the eagle soaring toward the sun or the lark pouring floods of melody through the sky, but the raven with his dismal croak. Music is the proclamation of the supernatural—the rhythmical assertion of man's immortality. It is the soul seeking to express its freedom and rapture, and to burst the bars of human speech. Zundel said that he never prayed so effectually as when seated at a grand pipe-organ's keyboard. Another declared that music was a higher revelation than science; that it was a bridge over which rare and purified spirits might wander from earth to heaven. Handel, when composing his great oratorio of the Messiah, declared himself so translated out of himself that, like Paul, he might say, "whether in the body or out of the body, I know not." Appropriately,

beneath his statue of upturned face in England's great Abbey, are inscribed the words, "I know that my Redeemer liveth." And if you listen to any of the great tone-poets—to Bach or Haydn, Mozart or Mendelssohn, Wagner or Beethoven, what themes do you find them embodying in their celestial harmonies? Are they light or licentious, or merely voluptuous chords? No; they sing like St. Cecilia, till the angels in heaven cease harping to listen to the strains. Now it is some oratorio of the "Creation," now of "Moses in Egypt;" now of "Elijah," and now of the "Messiah;" now the beautiful legend of the Holy Grail, and now the solemn notes of passion-music, and now the triumphant peals of the Hallelujah Chorus. Thus worship and melody are inseparable. But atheism hath no music in its soul—"'tis only fit for treason, stratagems and spoils."

Looking away now to the *poets* of the world and the famous *men of letters*, we shall find that atheism has produced little here of permanent worth. Indeed, after you have taken God out of the universe altogether, after you have taken all the spirit out and reduced it to a mere gigantic piece of mechanism, grinding inexorably on, careless of pain or cries of prayer, what have you left to poetize upon? As Wordsworth cries, regarding such a condition as the outcome of all our civilization:

> "Great God, I'd rather be
> A pagan suckled in a creed outworn;
> So might I, standing on this pleasant lea,
> Have glimpses that would make me less forlorn;
> Have sight of Proteus, rising from the sea,
> And hear old Triton blow his wreathed horn!"

We may be pointed to Shelley and Byron, as being unbelievers, and yet great poets; and brilliant they certainly were, but their careers have only illustrated Milton's saying, that he who would write a great epic poem must first make his life a poem; for the first is remembered chiefly for his blasphemy, and the second as being the poet of lust. But, from the time of Job and David, religion and poetry have always gone hand in hand. Homer and the old Greek dramatists, Euripides, Æschylus, Sophocles, were eminently religious men, and their poems became the sacred books of those old religions. The sublimest epic in the English tongue sings of how Paradise was lost and regained.

And Dante, the sad-faced Florentine, wanders amid the shades of the departed in Purgatory. Every reader of Shakespeare knows the great writer's indebtedness to the Bible, to which he makes allusion on almost every page, and the deep undercurrent of belief which runs through all his writings. Goethe is often represented as a complete atheist, but in his old age he said: "You ask me if it is within me to do homage to Christ, and I answer emphatically, Yes;" he declares that man's soul, in death, is like the setting sun, which appears to go out, but, nevertheless, is still shining in other skies, and, himself a great scientist, ridicules the pretensions of science, which, as he said, having now once got upon her feet can dispense with all breath of the supernatural. Even the ribald and jocose Burns had precious moments when he wrote "To Mary in Heaven," "The Cotter's Saturday Night," and such stanzas as

> "An atheist's laugh's a poor exchange,
> For Deity offended!"

You will not surely turn for atheistic sentiments to Mrs. Browning, Shakespeare's daughter, nor to the sweet and homelike pages of our Longfellow, nor to the almost sacred lines of Whittier, overflowing with a filial spirit of piety, nor to the great Tennyson who says of what so many vainly mock:

> "More things are wrought by prayer than this world dreams of.
> For what are men better than sheep or goats
> That nourish a blind life within the brain,
> If knowing God, they lift not hands of prayer,
> Both for themselves and those who call them friend."

If you look away from the poets to the great *prose-writers* of this eminently sceptical century, you will find them successfully resisting the spirit of the age. You shall hear Carlyle declaring that, "The man who cannot wonder, who does not habitually wonder and worship, were he President of innumerable Royal Societies, and carried the whole Mécanique Céleste, and Hegel's Philosophy, and the epitome of all Laboratories and Observatories with their results, in his single head—is but a Pair of Spectacles behind which there is no Eye." And once again he cries: "On the roaring billows of Time, thou art not engulphed, but borne aloft in the azure of Eternity. Love not Pleasure; love God.

This is the Everlasting Yea wherein all contradiction is solved; wherein whoso walks and works, it is well with him." You will find Ruskin pleading for the Christian virtues and graces with all the solemnity of a preacher. You will hear Walter Scott, on his death-bed, after inquiring for "the book," answering the question: "What book?" by exclaiming: "There is but one book! Give me the Bible." You will see George Eliot, rationalist but no atheist, in daily communion with the Scriptures, and keeping a copy of the "Invitation of Christ" constantly on her desk.

But, it may be replied, your poets and novelists are not competent witnesses on this question; they do not possess critical minds. It is necessary for you to turn to *scientists* for these.

It is necessary to hold science in great reverence for the importance of its revelations and for its truths given to this century. He who speaks against science blasphemes God. It is my sincere conviction that science is destined to advance belief. As Paley used the science of his day to support his argument for a God, so are we to consecrate geometry and chemistry and biology for the defence of faith. And though many men who are scientists may proclaim themselves infidels, it is carefully to be inquired, whether their science made them infidels, or whether they were so before and for other reasons; and whether a true belief might not have brought them nearer to the great Central Truth of the Universe whence they could better unravel all truth.

Mr. Darwin, indeed, confessed that there were two things of which he never had experienced the need—poetry and religion; but does not this rather argue a defect in his constitution than that men should abjure all poetry and all religion thereafter forever? And Mr. Tyndall says that the continuance of religion is assured by the unquenchable emotions of the human heart. We have, indeed, some scientists to-day like Huxley, who are not remarkable for faith, but for one such there are a score almost, as eminent students of the same subjects, who are believers. And if we review the list of the scientists of former ages, we shall see among religious men Bacon, Copernicus and Galileo, Newton, Cuvier, Lardner, Faraday, Franklin, Pascal, Leibnitz, and Kepler

who cried: "I think Thy thoughts, O God!" We hear Carl Ritter, the great geographer, sending on his book to be one more note in the great choral anthem—the *Gloria in Excelsis*—which science must be ever raising if she would keep her integrity. We hear Hugh Miller calling his geological work, "Footsteps of the Creator;" we hear Dana arguing for immortality, because man has the promise of another world, in that this has been so magnificently fitted up simply to be his dwelling-place. We hear Asa Gray, the distinguished botanist, declaring that the tendency of science is not toward the omnipotence of matter but toward the omnipotence of Spirit. We hear Morse, the electrician, saying of his invention of the telegraph, "It comes to me like an inspiration from God;" and, if we listen to the first words that are flashed along the cable beneath the blue Atlantic, they are these: "What hath God wrought?" We hear Agassiz, on the island of Penikese, saying to his class just about to commence the study of biology, "Young gentlemen, before we commence to look into the secrets of Nature, let us seek wisdom from Nature's God. Let us pray." And so I might summon Proctor and Wallace and Guyot and Mitchell and Winchell, all scientists of these times, who yet can maintain scientific consistency and accuracy without repudiating God and the Bible. If a few names of infidel scientists are on everyone's tongue, it is simply because their very rarity allows them all to be easily known.

If now we abandon our defensive position and assume an aggressive attitude, we may well challenge atheism to declare for itself what it has done for humanity outside of its boasting. Has it ever reached and thrilled the popular heart? To a certain French philosopher, who had invented a new deistical religion, and was complaining that his propaganda did not advance satisfactorily, it was once said—"My friend, you are attempting to do a very difficult thing, and if you would be entirely successful, I advise you to go and be crucified and rise again the third day." It is told in the early English chronicles, that once the king and council were debating about the acceptance of the Christian religion, when an aged sage arose and said, "O king, it appears to me, as when in the winter time, we are

all assembled in the great hall, around the roaring fire of oak-logs, and a swallow flies in from the cold and darkness, and out at the other side, into the tempest again. For a moment only it enjoys the cheer and warmth. So is the life of man. Out of the darkness he comes, and into the darkness he departs, and if this new faith can give us aught of hope or cheer, let us receive it."

If we look to the performances of infidels, does history justify Voltaire in lighting the spark which afterward kindled into the fires of the French Revolution? Or if such a blatant atheist as Karl Marx, recently on our shores, could be successful in stirring the people to arson and murder, would the world be very grateful?

But look at the characters of these men. Of Voltaire, a recent biographer and admirer confessed that his life was one continuous grin from the cradle to the grave, and he ridiculed Shakespeare with all the freedom that he did the Scriptures. Gibbon seems to have had in his composition no reverence, no regard for the race, no pity for the poor, but to have been sordid, heartless, selfish, full of vainglory and a desire for adulation. The school of Hume and Hobbes and Bolingbroke taught the most infamous system of utilitarianism, claiming that female virtue was no excellence, adultery no crime and monogamy not the law of nature; in fact they seemed to have advocated the principles which have blossomed in the doctrines of free-love and communism. Rosseau, in his "Confessions," declares himself guilty without measure and without remorse. None of these men went to any barbarous isle to reclaim the savage, nor to any city slums to lift up the wretched, ignorant and fallen, nor left behind them any work which continued to bless the world after they were gone. Rather, the whole effect of their lives and teachings was to make life more difficult and cheerless, to sap it of hope and courage and inspiration.

Put over against the characters and records of such men as these those names which have been denounced as leading men into the darkness of superstition—Moses, John, Paul, Luther, Wesley—and say, for yourselves, to which class you would more readily commit your hearths and homes, the instruction of your children, the safety and honor of society and the state.

But, against the former and far above the latter, place the Name of One who in His single individuality would outweigh all the infidels of all time; One of whom Jean Paul Richter says that "He was the holiest among the mighty and the mightiest among the holy, who lifted with His pierced hand empires off their hinges, and turned the stream of centuries out of its channel, and still governs the ages"; One of whom Spinoza said that He was "the symbol of divine wisdom"; One of whom Carlyle says: "Higher has the human thought not reached. A symbol of quite perennial, infinite character, whose significance will ever demand to be anew inquired into, and anew made manifest"; One of whom Herder says that He is "the realized ideal of humanity"; One of whom the great Napoleon said: "Sublimity is said to be an attribute of divinity; what name, then, shall we give Him in whose character was united every element of the sublime?" And, to all these testimonies, there are not wanting the eulogies of rationalists and infidels themselves—men like Parker, Renan and Diderot—who cannot repress their admiration for Jesus of Nazareth. May it not truly be said of Him that His name, example, influence and deeds are enough, in themselves, to prove that the Greatest is always the Holiest?

It has become the fashion, with certain rhetorical infidel platform-speakers, to make proof of their own greatness by ridiculing and pouring contempt upon the Scriptures of the Christian Church. Considering the superciliousness with which they refer to this volume of the oldest literature of the race, it must be a very easy task for them to compose a book which shall be much more acceptable to the race and be held in veneration for ages to come. Let them make the attempt! Let them put their heads together and produce a book, which they shall successfully palm upon the public as an inspired volume, and have the generations of men, for four thousand years, love, obey and be guided by it, reading it in public and in private, and regarding it as the very oracle of God. To do this is but to perform what they allege was done with success by simple-minded, rustic fishermen, and it can be no very difficult undertaking. But meanwhile we will continue to use the old Bible, having in mind the reply of an individual of eminent common-sense, who, being

asked by a sceptic, "How long will you persist in reading that old book?" made answer: "Until you give me a better book."

And, concerning this at present much-abused and laughed-at Book, what have some of the greatest of the race thought and said? Have they been compelled by their superior intelligence and profound reasoning powers to scoff at and renounce it? Says John Adams: "The Bible is the best book in the world. It contains more of my little philosophy than all the libraries I have seen." Says Goethe: "It is a belief in the Bible, the fruits of deep meditation, which has served me as the guide of my moral and literary life." Says William Wilberforce: "Read the Bible, read the Bible! Let no religious book take its place." Says William H. Seward: "I do not believe human society, including not merely a few persons in any state, but whole masses of men, ever has attained, or ever can attain, a high state of intelligence, virtue, security, liberty or happiness, without the Holy Scriptures." Says Daniel Webster: "I have read it through many times. I now make a practice of going through it once a year. It is a book of all others for lawyers as well as divines; and I pity the man who cannot find in it a rich supply of thought and rules of conduct." And, lastly, let us hear the testimony of one, not an orthodox believer, but quite far from being the atheist he is often represented by those anxious to claim him. His estimate may be all the more convincing on account of his general scepticism. Says Thomas Jefferson: "I have always said, and always will say, that the studious perusal of the Sacred Volume will make better citizens, better fathers and better husbands." Such expressions might be indefinitely multiplied, but enough have been given to show that a man is not necessarily a fool if he ventures still to love his Bible and his religion.

Thus have we gone together to the Philosopher, dropping his plummet into the abysses of the human soul and exploring the universe to find out God; to the Historian, prosecuting his researches into the record of man's thoughts and deeds of the past; to the Discoverer, furling his sails from his circumnavigation of the earth; to the Statesman and Patriot, in the council-chambers of nations and amid the rolling drums of the battle-

field; to the Lawyer and the Scholar, buried in the folios of office and studio; to the Philanthropist, returning from his errand of sympathy and mercy to the unfortunate and oppressed; to the Artist, Sculptor, Painter, Musician, revelling in scenes of beauty and holding before us an entrancing ideal; to the Poet and Writer, penning thoughts which shall outlast the pyramids; to the Scientist, returning from his examinations of force and matter, on the earth and in the heavens—and these all make one confession and that confession is fuller, richer, sweeter, grander, than the short and dismal creed of him whom the Psalmist long since called "the fool."

MONCURE D. CONWAY was very much disappointed with the state of things in India—disgusted in fact with the outcome of the "Light of Asia." He writes: "But when I went to the great cities, the pilgrim sites to which throng every year millions of those who profess to follow the faith of the men who wrote these books, and mingled with the vast processions of worshippers at the shrines sacred to the deities whose praises are sung by the Hindu poets, then alas! the contrast between the real and the ideal was heart-breaking. In all those teeming myriads of worshippers not one man, not even one woman, seemed to entertain the shadow of a conception of anything ideal, or spiritual, or religious, or even mythological, in their ancient creed; not one glimmer of the great thoughts of their poets and sages lightened their darkened temples. Of religion in a spiritual sense there is none. Looking down in all but despair upon this vast rotting jungle of dead religions, watching these gods of worship, which in any other country but the East would qualify the worshippers for admission into a lunatic asylum, I felt that I was in the presence of a vast mass of disease, which could be healed by nothing around it. At present the prospect seems almost hopeless."

AGNOSTICISM.

[Extracts from an Address, delivered at the Church Congress, Detroit, October, 1884.]

By Rev. Alexander Mackay-Smith,

Assistant Minister of St. Thomas' Church, New York.

PRACTICAL atheism is as old and terrible a feature in human nature as any we are familiar with. But Prof. Huxley (who was, I believe, the first to use the word "agnostic," suggested to him by St. Paul's mention of the altar at Athens "to the unknown God"—*Ἀγνώστῳ θεῷ*) has, by a single masterstroke, given atheism a new and fascinating aspect. Its first charm is that he has clothed it in modesty. Emphasize the first syllable of the Agnostic Creed, "*I* cannot know God." Poor I, so humble, so weak, so insignificant! What a stealing of Christian virtue in this! One can almost see the triumph on the spoiler's face, at masquerading in such a robe as humility. It recalls Disraeli's epigram about the English Tories, that they had found the Whigs bathing and stolen their clothes. For, "Be clothed with humility," says St. Peter. Atheism in the past has been too arrogant. "There *is* no God," it has asserted, haughtily. This world-spirit has been too arrogant, and provoked reaction. "You are as dogmatic as the faith you denounce," men have answered. But atheism is doubly dangerous in its new attitude. It whispers, "Blessed are the meek;" "*we* cannot know God—it is beyond us." Such a tone appeals to many who were formerly repelled. An agnostic becomes to them a humble-minded man, who is too conscious of his weakness to range himself among these confident Christians. We see at once the speciousness which this point of view gives the argument.

Again, the agnostic wields a far more dangerous weapon than the atheist, inasmuch as he seems to speak so practically to practical men. To a bold, common-sense, vigorous man of the

world he says not so much, "I cannot know God," as "I *do* not know Him." "He may exist," he adds; "I do not deny or affirm it. But I do know that I exist, and that there is a world about me full of activity, chances of success, health, and happiness enough to occupy me without idle speculation. *Carpe diem.* Let us make the most of this real world, without troubling ourselves about outside matters." You see at once, again I say, the power of such an argument over strong earthly natures like ours. It has a common-sense, practical ring about it, and as such is specially adapted to the distinctively American mind Such a view is called Secularism in England. Its prophet is Bradlaugh. Here we call it "Ingersollism." But, call it what you will, it is simply a form of agnosticism. It tries to undermine the reality and authority of every motive proceeding from man's spiritual nature, and would hide the baseness of its results behind the glitter of a civilization as heartless as a tiger and as tawdry as a glass necklace. Said one of its followers to a poor friend of mine, who declared that her faith in God was her only comfort, "Your best God would be a ten-dollar bill." That is the true spirit of secularism. It is perhaps the most dangerous foe to Christ which the world can show, for it enlists as its soldiers every selfish passion known to human nature.

Here then, I think, we grasp, at least in a measure, the secret of the agnostic's power in literature and society. He appeals to the doubter who has deeply ethical instincts by his very modesty, by his humility of disclaimer, and by his disparagement of our poor intellect. And he gains men of a different sort by his approval in them of those very tendencies toward still greater absorption in worldly matters, which it is so pleasant for them to hear encouraged.

Let me simply mention a few of the arguments which I have at times found useful in conversing with men (more especially young men) attracted by the agnostic view of life. I cannot, of course, seek to verify the foundations of all such arguments in the space allotted me, but I believe they will bear examination from such as choose to study them.

First, as to the meek agnostic; then as to the secularist.

"*I cannot* know God," says the meek agnostic. Why? Mainly

—if we condense whole reams of arguments into one—because it is claimed that we do not know of anything as it may *really* be, but only as it appears to our single mind. We are conscious only of certain effects in nature called matter, motion, and force, endlessly combined. But these are mere *names;* the reality behind them we are ignorant of, except as concerns a few of their effects in working. Of God Himself, then—if there be one —we can form no conception, for He lies behind these phenomena, and is outside our experience. And if we *could* form a conception, or know by experience, it would be simply *our* conception, our experience, differing perhaps from that of every one else, and utterly unverifiable. This is an imperfect, because condensed, and yet, I think, not misleading account of Mr. Herbert Spencer's argument. But logically carried out, it vitiates all belief in any life outside ourselves. I see the bodies of my friends as they move. But the same blindness which makes me ignorant, according to Mr. Spencer, whether God exists, forbids me (because it is outside my experience) to believe that there must by a personal consciousness within those bodies. I hear them speak and see them act. But the agnostic deprives me of any reason by which I can be convinced that every one in this audience is not a mere unconscious automaton moving—as I am told nature moves—mechanically, unwittingly. So I stand in a world of shadows. Nay, worse! The same reasoning drives me to doubt as to my own consciousness. Mr. Spencer supports me. He asserts that the cognition of self is negatived by the laws of thought; "therefore, logically," he adds, "we cannot know that we exist. We believe that we do, for this," says Mr. Spencer, "is unavoidable; . . . but reason rejects the belief." Now, what a dreadful state of affairs this is! It is bad enough to lose one's friends, but to lose one's self is worse. And yet I cannot be even sure whether it is a nightmare or not. For since I doubt that I am I, I also am bound to doubt whether I doubt. And so, beginning by knowing that I cannot know God, I end by knowing that I cannot know whether I know or not. This is but one of several fatal objections to Mr. Spencer's argument. If that argument proves anything, it proves too much. It is, in other words, a *reductio ad absurdum.*

Now, I would ask, since, in spite of Mr. Spencer's logic, both he and we do believe in our own personality, in our friends, and in the objective world about us, what are we to think of the reasoning by which he would darken God, when he confesses that, if followed out, it would annihilate man also? Is such indefinite, and uncertain, and vague metaphysic to play any practical part in shaking your faith or mine? I think not. Granted the truth of your own consciousness and that of others, your faith in God is reasonable. You infer that your mind, so wonderful in its powers, must have had a cause, and you follow that cause back, until you come inevitably to some First Cause greater than all other causes, since it caused them. It must be Personal, Conscious, Sentient, because you are all these, and It cannot be inferior to its own creation. If you accept evolution, you but increase the wonder; for as you magnify the majesty, certainty, and universality of the law which has produced a Shakespeare or a Newton at one end, out of an *Eozoon Canadense* at the other, you magnify also the intelligence and the power which gave that law its initial velocity. Out of primordial dead atoms emerges a magnificent nature and a complex civilization. Yet men can be found to say, that of the cause producing this result we cannot even know that it had, or has, an intelligence, goodness, design, and sense of personality equal to our own. No, it was not God; it was Law, they say. A very terrible fetich, a Chinese gong to scare us, until we learn that *Law* means, after all, only the inevitable way in which things work. But why work so? Why not all confusion? It would be, if chance were its master. Why does not the law show any signs of exhaustion or weariness, like a spent cannon-shot? Why does evolution tend, in the long run, up rather than down? You cannot reply satisfactorily without predicating intelligence, and intelligence is unthinkable without personality. But if you allow this, you are no longer a real agnostic.

But I turn to a still more practical argument. Come down to Bradlaugh and Ingersoll, the secular agnostics. Their followers care nothing for such reasoning. Mr. Ingersoll does not trouble himself whether the mind *can* know God. He simply says we don't know Him in any sense of personal revelation, and

must, therefore, leave Him out of the question. But you can't leave Him out, my dear sir. You constantly accuse the Christian Church of talking sentimentalism, emotionalism, and deceit in her theology; you call her teachings weak, unverified, and delusive. But in reality, and speaking in all courtesy, this very charge applies to your own dogmas, and crushes them. Christian doctrine sentimental, delusive! What, then, shall we say of a man who denies all spiritual and divine forces in the world, and yet makes the mainspring of that better, Godless future for which he sighs, to be duty, responsibility, righteousness, and love? My dear Mr. Ingersoll, this will never do. It is the wildest emotionalism and cant. Duty equals that which is *due*. I ought is something I *owe*. But to whom, to what? To my fellow-men? Give me a reason for it. You cannot. I do not wish to seem immodest, but I am willing to make an open confession of infidelity, if before any five reasonable, intelligent men as judges, chosen fairly, any unbeliever will give me a scheme of duty which, denying God, shall yet state a clear reason why any man should hesitate at any crime which he may commit without discovery or injury to his health and purse. Duty to my neighbor! Why should I care for any other "fortuitous concourse of atoms" than my own, simply because chance has placed it near me? I only *know* about myself. Nay, I ought (if I may use so absurd a word) to care for nobody else, except in so far as they hit my fancy, or have the power to injure or to help me. Do you speak of the moral law? It is a mere name. Coming from nothing, it has no force. It is the selfish figment of society to preserve its property. Conscience! Why, that is, as you all say, a mere inherited power. Why should I be hampered by the scruples of generations of dead men I never saw, acting in my blood, if, at the moment, it is for my clear interest not to be? Why should I shudder at so-called evil? These feelings are mere secretions of the brain, to be conquered when they make us uncomfortable. You say conscience preserves society. But why should I care for society? It will last my time and my children's, I dare say. *Après nous le déluge*. Vanish, then, ye vain delusions! The whity-brown particles of my brain take a spiral movement to the right, let us suppose, and that makes me

recoil at evil; or to the left, and I rejoice in it. My true policy, then, is to cultivate the left-hand movements; for if I am not responsible to any one man, then not to all the units in the world added together, and what other power is there? Pleasure and pain are my god; for the one thing I do know is, that I can suffer and enjoy. And if I find in life that I suffer more than I enjoy, why, then, give me some painless poison, and a quick leap out of trouble. But ah, one caution. While I remain, it is for my manifest advantage that my neighbors should believe in virtue. Let me, therefore, dissemble, and say, "O virtue, how I love thee!" But in private I may please myself.

Mr. John Stuart Mill and Mr. Spencer have tried to elaborate a system of ethics which should have power over an intelligent, and godless, but strictly logical mind. And their great abilities and learning have served, by contrast, to show their failure in its true light, as lamentable, pitiable and complete. Neither has given, upon his premises, I dare to say, a single convincing reason why any man should curb a single passion in which he knows by experience he can safely and secretly indulge. Indeed, the eminent English sceptic, Mr. Greg, has lately confessed that the unbeliever's creed should logically be this: "Be virtuous, but not *too* virtuous." Multitudes of agnostics are men of the noblest and most uncompromising virtues: but is it not the heart overpowering the head? And what shall we say, I ask again, of Mr. Ingersoll and his followers, who, having cut off (in their view) the greatest reason why a human being should be self-denying, generous and pure—viz., that he may be the true child of his heavenly Father—still paint in glowing colors a society founded on those very virtues whose source and motive-power they deny? With all respect to them, it is not the Church, but they, who are sentimental, vague, and delusive. You cannot thus both eat your cake and keep it. I sometimes think it would be interesting to hear an agnostic address a State's Prison audience. What ground would he take? "You have been very silly to get in here," he might say. Yes. "Very imprudent to be so rash." Yes. "Very wrong to break the laws." Ah, Mr. Ingersoll, what *is* wrong? A criminal takes his risk, as a sailor does at sea. He may be lost, but that is his misfortune, his lack of wis-

dom, perhaps. But let him steal millions next time, go to Congress, and die respected, feared, envied. How would you classify him then?

Now, it is just here that I would make my last hurried argument in defending the Christian standpoint. I have tried to do so *negatively* by showing that the agnostic is logically wrong—first in philosophy, and second in morality. Now, one point *positively* in the same line as the last. A sceptic might reply to me, "I confess that religion and a God are useful for restraining evil, but I love truth so that I will proclaim it, no matter what results. Let the world go to moral ruin; but if no God, say so." Now, I would reply to that: A thousand times yes, my friend; truth is so magnificent a thing, and so demands and deserves our loyalty, that to die for it is not too much. But it is just because *we* believe this, that we believe in a God who stands behind truth, and gives it its value and grandeur. All over the world men worship moral greatness. Infidels, heathen, Christians, worldlings bow to moral qualities—sincerity, truth, generosity, self-sacrifice. They consider the grandeur of these facts to be primary, intuitive certainties, beyond disputation, "ringed with the azure world." Now, my friend, ponder this argument. If you agree to this, you must believe in a personal, loving God, the author and possessor of these virtues—nay, in a future life, if you consider what they imply. For why should truth be followed, though the heavens fall? Why should you, the sceptic, love it so, that, as you say, you are willing to follow it to the dreariest conclusions, and ruin your life? It is all a delusion, a Will-o'-the-wisp, if you and it came from nowhere, and go no whither. It would be as absurd for you to die for it as "to die of a rose in aromatic pain," or to die for the color in a picture, the expression in a symphony, or for a theory in chemistry. A thing must have a person behind it to give it supreme value. Gold would be useless unless men were willing to buy or work it. A sailor values a lighthouse only because the whole nation seems to stand behind it, saying, "Sail *there*." If lighthouses grew haphazard, what value would he place on them, then? But am I not more logical than you? I say, Yes; miserably imperfect man as I am, I believe so thoroughly in moral truth, as having

value in itself, and not being merely a useful fiction to restrain robbery and lust, that it throws one back necessarily on the fact that a God must exist who gave truth, and desires me to follow it. I cannot believe that all virtue is in reality a phantom, a mirage, a useful, selfish cheat, and that one is talking secret foolishness when he says that sincerity, purity, honesty are good *absolutely*—good *in themselves*—as distinguished from useful. As much as I believe in the reality of this body of mine, which I touch—as thoroughly as I am convinced that parallel lines do not meet, or that twice two is four, so positively do I know—yes, *know*—that such a thing as Purity, or Self-sacrifice, or lofty Principle has inborn *in* it a divine essence of righteousness, which has nothing to do with my opinion, or with yours, or with our forefathers' in its origin. Observe that men and nations may differ as to *what* is right and wrong. "The time cometh that whosoever killeth you will think that he doeth God service," said our Lord to His disciples. That is not the point at this time. The point is, that back of all that there is in the human soul an indestructible conviction of the *necessary* difference between the ideas of Right and Wrong in the abstract, and of the inherent right of certain virtues and wrong of certain vices, however we may dispute as to what constitute them. And when we come to analyze, as far as we may, that conviction, we find that in its turn it logically implies a future life. If right be *really* right, and if the absolute truth is that, as even atheists confess, a righteous, unfortunate man is a more desirable model to set before our children than an unrighteous, prosperous one—if, once more, one ought, as even atheists confess, to die on the scaffold for principle rather than to mount a throne at the price of betraying it—if this is as firm a conviction of an intelligent mind as any axiom, and not confessed to be "a tale told by an idiot, full of sound and fury, signifying nothing," then *must* there be another existence beyond ours to justify, to prove, and to complete all this. I leave those who accept these premises to work out any other conclusion.

Had I the space, I could wish to point out at greater length than I can now do, the reasonableness of a Revelation of God to the world, such as that made in Christ. For if, in meditating

the nature of right and wrong, we are led up to a personal God, who gives us the idea of them, then the bridge is thrown across the chasm between God and man. If duty and righteousness can cross, so can Revelation; nay, if across this bridge God has sent the dim angelic figure of natural Religion to guide His children, it seems a supremely reasonable *sequitur* that the substance should follow the shadow, and that a more powerful guide and a stronger motive-power should be given to those whom natural religion could not sufficiently influence. If there is to be a future life, as seems proved by the inherent *raison d'être* of Right and Wrong, is it not needful that they who are to inherit it should understand this clearly? Is sin to be forgiven in the next world? Is there everlasting life in God? Any unbeliever will confess that these are important questions. But let him also allow, for argument's sake, that they were to be answered in the affirmative. That is just as possible as the opposite. But in that very possible case how could men be taught these truths without a direct Revelation? Thus Revelation appears supremely natural, nay, necessary, if we assume that God has more light to give us than He has put into our hearts silently. And I leave you again to ponder whether it is not reasonable, rather than unreasonable, to hold ourselves ready to believe that, having given us the knowledge of right and wrong, He should be desirous of preparing us for that future life which they seem so strongly to imply.

But I return to the agnostic point of view once more. Having decided that he cannot know God, he also cannot feel that he knows virtue or righteousness in any positive or absolute sense. He can only say to himself, "I don't know whether virtue has any authority, whether goodness is real, or has any ground or not; but I must pretend to myself that it has, and act out the fiction for various reasons."

Now, who holds the nobler, truer ground before the world—the unbeliever or the Christian? Compress the Christian idea again. We do not love virtue simply because it is useful or beautiful, as an agnostic must do; but we believe that a thing so self-commended as virtue, so intuitively true, *must* be from God, and cannot be false. Because we believe in virtue as absolute,

it *compels* us to believe in God. For virtue in society is like law in nature, holding it together; and the Christian believes that so glorious a thing, so heartfelt a good, such a conserving principle, which alone prevents chaos—that this must have a purpose and cause behind it to make it true, and cannot be from chance. Yes; moral truth, however nations and creeds may differ as to its boundaries and definitions, is, in its last analysis, intuitively true—yet not without God. It is the salt and the salvation of the world—yet not without God. So it is that we believe not only that we *can* know God, but that we *do* know Him. If that awful, yet loving, glorious, and holy Personal Cause does not exist, one can believe in nothing, the distinction between right and wrong disappears—nay, there is no reality in cities, or lands, or in this audience—for I am very sure that these are no more certain to any one of us than is the statement that purity is to be always chosen rather than lust. Yet why? The agnostic, the secularist cannot ignore that question as to the origin of moral truth. His first step in forming the future raises it. God will not be thrust out of the world He has made, either under the plea of a false humility, "I *cannot* know Him," or by the argument that it is all a useless problem, and that "I *do not* know Him." It is the primary question of life.

To every form of being is assigned
An *active* principle: howe'er removed
From sense and observation, it subsists
In all things, in all natures; in the stars
Of azure heaven, the unenduring clouds,
In flower and tree, in every pebbly stone
That paves the brooks, the stationary rocks,
The moving waters, and the invisible air.
Whate'er exists hath properties that spread
Beyond itself, communicating good,
A simple blessing, or with evil mixed;
Spirit that knows no insulated spot,
No chasm, no solitude; from link to link
It circulates, the soul of all the worlds.

—*Wordsworth.*

MONTHLY MEETINGS OF THE INSTITUTE.

By Charles M. Davis, Secretary.

At the regular monthly meeting of the Institute held December 4th, in its rooms, No. 4, Winthrop Place, the devotional exercises were conducted by Rev. Dr. Wilbur F. Watkins, Rector of the Church of the Holy Trinity. The President, in accordance with a resolution passed at the last meeting, appointed two new members of the Executive Committee, Rev. O. H. Tiffany, D.D., Pastor of the Madison Avenue Methodist Church, and Rev. Alexander Mackay-Smith, Assistant Minister of St. Thomas' Church, both of New York.

Prof. Edward J. Hamilton, of Hamilton College, read a paper entitled, "A New Basis for the Philosophy of Conviction." Professor Hamilton argued that the doctrine of belief was the essential part of mental science, and that part from which every system of metaphysical philosophy took its character. He showed that this doctrine was under discussion among every school of thinkers, and then sketched briefly the theories of Aristotle, that of Locke and Leibnitz, and that of Mill and Spencer, and of Immanuel Kant. He then presented his own views, which he calls "The New Basis." [See the first paper in this number.] The meeting was closed with prayer by Rev. Dr. Philip Schaff.

A large audience was present at the meeting held Thursday evening, January 8th, in the rooms of the Institute, the President being in the chair. The devotional exercises were conducted by Rev. S. H. Virgin, Pastor of the Pilgrim Congregational Church. After the transaction of miscellaneous business, the Institute was addressed by F. Cope Whitehouse, M.A., whose subject was, "The Recent Explorations in the Fayoum, and Original Surveys; with the Arabic Traditions of the Canal of the Patriarch Joseph, and the Situation of the Land of Goshen."

The speaker, who has thoroughly explored the district which

he described, gave his hearers a vivid description of the mountains, hills, plateaus, ravines and wadys, and the cañon of the Nile, so that they seemed to look down upon it, and almost to travel it with him. He believes the land of Goshen was west of the Nile and south of Cairo.

OUR LETTER BOOK.

THE REV. C. LLOYD ENGSTRÖM, the Secretary of the Christian Evidence Society, London, after complimenting CHRISTIAN THOUGHT, offers the following strictures:

"I specially like your contribution, 'The Field To-Day,' though, if you will pardon me for saying so, I think one paragraph might have been differently worded, viz., that 'We are . . . otherwise,' page 84, following 'Outside Christianity.' I personally consider many to be much more truly Christian, who wouldn't even consider themselves to be Christian at all, than those who call themselves Christians, and have been baptized and confirmed (I am an Episcopalian) and are communicants; so that, in principle, I probably agree with you, but it seems to me that the wording implies that you think outward organizations are of no importance. Perhaps you do not, and in that case I should differ from you. But the point is not what I think (or you think), but as to the wisdom of saying so (if you think so), speaking as you do as the champion of all denominations of Christians. This slight blemish (if blemish it be) is respectfully pointed out by me, just because it is, I think, the only blemish I noted. May I also add that Professor Tillett's admirable quotations would have been doubly valuable if he had given exact citation to the chapter and verse. For unbelievers (here at any rate) such references are absolutely necessary, for they often deny their authenticity, and even for ourselves it is well to be able to verify, as so many good men are hopelessly inaccurate in their quotations; besides the verification often leads to useful acqaintance with a book."

For the Editor's part he admits that upon the review of the passage in his lecture on "The Field," etc., the point is well taken. The passage was not sufficiently guarded if it made any one so intelligent as Mr. Engström suppose that its author regards external organizations of no importance.

D. McLane Reeves, D.D., Johnstown, N. Y.: "The number of Christian Thought you forwarded me, September–October, pleased me emphatically, especially the Hindoo's account of Hinduism. His use of the word annihilation strikes me as misleading; absorption back into the sum of being, the swallowing back of the self into the not-self, of the ego into the non-ego is not accurately expressed by our English word annihilation. May God speed you in your attempt to get Christians to think more clearly."

Mr. John H. Burroughs, Philadelphia, submits the following thesis: "If an infinite mind exists, the absolute identity of mind and matter is impossible. For, if mind is matter, an infinite mind is infinite matter. If there is infinite matter it must occupy infinite space. If infinite matter occupies infinite space, there cannot be motion; for, in that case, there cannot be space for matter to move into, and, therefore, there cannot be motion; but, there is motion, and, therefore, there must be space unoccupied by matter, and, since there must be space unoccupied by matter, there cannot be infinite matter. And, if there cannot be infinite matter, if infinite mind exists, infinite mind cannot be infinite matter. Neither can infinite mind be finite matter, for then infinite mind could not be infinite. All matter is either finite or infinite. Hence, infinite mind cannot be matter. Mind is the same in essence, whether mind be infinite or finite; *e. g.*: Water is H_2O, whether water exists as an ocean of water or as a drop of water; equally true is it, that mind is the same in essence, whether mind be infinite or finite. Hence, finite mind cannot be matter. But, mind is either finite or infinite; and, hence, mind cannot be matter. Hence, if an infinite mind exists, mind, whether it be infinite or finite, cannot be matter. Therefore, if an infinite mind exists, mind, whether it be infinite or finite, must exist as an entity wholly different in essence from matter; and, hence, if an infinite mind exists, the absolute identity of mind and matter is impossible."

A condensed examination of thesis would be acceptable. For instance, is the position tenable that, "If infinite matter occupies infinite space there cannot be motion"?

MEMORABILIA.

ARTHUR BALFOUR: "All scientific beliefs are in themselves as true and as fully proved if supernatural interference be possible as they are if such interference be impossible. A law does no more than state that under certain circumstances (positive and negative) certain phenomena will occur. If on some occasions these circumstances, owing to supernatural interference, do not occur, the fact that the phenomena do not follow, proves nothing as to the truth or falsehood of the law."

PROFESSOR ELLIOTT COWES says that the secret of life eludes the Materialists, and continues: "When mathematics and physics and chemistry had each failed to show what life is, then biology —'The Science of Life'—had come to the rescue with a substance known as protoplasm; for physics had proven that nothing existed but matter in motion; chemistry had proven that protoplasm was matter in motion; biology had proven that life was a mode of motion of matter; *ergo*, protoplasm was the vital principle; and it had been just upon the point of being discovered by the Society (Philosophical Society) when the protoplasm, which the Society had examined, died."

DANIEL DEFOE: "I must testify from experience that a temper of peace, thankfulness, love, and affection is much more the proper frame for prayer than that of terror and discomposure; and that under the dread of mischief impending a man is no more fit for a comforting preformance of the duty of praying to God than he is for repentance on a sick-bed; for these discomposures affect the mind as the others do the body; and the discomposure of the mind must necessarily be as great a disability as that of the body, and much greater, prayer to God being properly an act of the mind, not of the body."

INGERSOLL.—Robert Ingersoll informs us that he proposes to devote his energies to the utter destruction of the Christian religion. We congratulate him on his brilliant prospects of

success, as seen in the fact that each year the Oxford Press alone uses, in printing Bibles, enough paper to form a belt around the globe eight and two-thirds inches wide.

THOMAS á KEMPIS: "Let not the authority of the writer be a stumbling-block, whether he be of great or small learning; but let the love of pure truth draw thee to read. Inquire not *who* spoke this or that, but mark *what* is spoken."

ROBSON: "All that is best in Positivism and Agnosticism was offered to the East in Buddhism 2,500 years ago, and as a theory of life it has entirely failed, being either rejected, as in India, or overlaid with grossest superstition, as in other lands where it has prevailed." In the way of error there appears to be little or nothing new under the sun.

PROFESSOR SILLIMAN made this record: "Now, at eighty-two and a half years of age, still, by God's forbearance and blessing, possessing my mental powers unimpaired, and looking over the barrier beyond which I soon must pass, I can truly declare that, in the study and exhibitions of science to my pupils and fellow-men, I have never forgotten to give all honor and glory to the infinite Creator—happy if I might be the honored interpreter of a portion of His works and of the beautiful structure and beneficent laws discovered therein by the labors of many illustrious predecessors. For this I claim no credit. It is the result to which right reason and sound philosophy, as well as religion, would naturally lead.

"While I have never concealed my convictions on these subjects, nor hesitated to declare them on all proper occasions, I have also declared my belief that, while natural religion stands on the basis of revelation, consisting, as it does, of the facts and laws which form the domain of science, science has never revealed a system of mercy commensurate with the moral wants of man. In nature, in God's creation, we discover only laws—laws of undeviating strictness, and sore penalties attached to their violation. There is associated with natural laws no system of mercy. That dispensation is not revealed in nature, and is contained in the Scriptures alone. With the double view just presented, I

feel that science and religion may walk hand in hand. They form two distinct volumes of revelation, and both being records of the will of the Creator, both may be received as constituting a unity, declaring the mind of God; and, therefore, the study of both becomes a duty, and is perfectly consistent with our highest moral obligations.

"I feel that, as this subject respects my fellow-men, I have done no more than my duty; and I reflect upon my course with subdued satisfaction, being persuaded that nothing which I have said or omitted to say in my public lectures, or before the college classes, or before popular audiences, can have favored the erroneous impression that science is hostile to religion.

"My own conviction is so decidedly in the opposite direction, that I could wish that students of theology should be also students of natural science—certainly of astronomy, geology, natural philosophy, and chemistry, and the outlines of natural history."

SWIFT.—The term "sweetness and light" did not originate with Matthew Arnold. Dean Swift, in "The Battle of the Books," compares the ancient and the modern writers as follows: "The difference is that, instead of dirt and poison, we have rather chosen to fill our hives with honey and wax, thus furnishing mankind with the two noblest of things, which are Sweetness and Light."

THE same old baffling questions! O my friend,
I cannot answer them. In vain I send
My soul into the dark, where never burn
The lamps of science, nor the natural light
Of reason's sun and stars! I cannot learn
Their great and solemn meanings, nor discern
The awful secrets of the eyes which turn
Evermore on us through the day and night
With silent challenge and a dumb demand,
Proffering the riddles of the dread unknown,
Like the calm sphinxes with their eyes of stone
Questioning the centuries from their veils of sand!

—*Unknown.*

NOTATA.

GOOD READING.—The Pastoral Letter of the Archbishops and Bishops of the Roman Catholic Church in the United States, assembled in the Third Plenary Council of Baltimore, is a very remarkable document. It contains some most wholesome teaching. The following, in regard to arts and books, is excellent: "Let the adornments of home be chaste and holy pictures, and, still more, sound, interesting, and profitable books. No indelicate representation should ever be tolerated in a Christian home. Artistic merit in the work is no excuse for the danger thus presented. No child ought to be subjected to temptation by its own parents and in its own home. But let the walls be beautified with what will keep the inmates in mind of our Divine Lord, and of His saints, and with such other pictures of the great and the good as will be incentives to civic and religious virtue. The same remark applies equally to books and periodicals. Not only should the immoral, the vulgar, the sensational novel, the indecently illustrated newspaper, and publications tending to weaken faith in the religion and the Church of Jesus Christ, be absolutely excluded from every Christian home, but the dangerously exciting and morbidly emotional—whatever, in a word, is calculated to impair or lower the tone of faith or morals in the youthful mind and heart—should be carefully banished. Parents would be sure to warn and withhold their children from any thing that would poison or sicken their bodies; let them be at least as watchful against intellectual and moral poison. But let the family book-shelves be well supplied with what is both pleasant and wholesome."

SOLAR HEAT.—"Of all solar problems," said Prof. C. A. Young in his annual address as president of the American Association for the Advancement of Science, "the one which excites the deepest and most general interest is that relating to the solar heat, its maintenance and its duration. For my own part, I find no fault with the solution proposed by Helmholtz, who accounts for it mainly by the slow contraction of the solar

sphere. The only objection of much force is that it apparently limits the past duration of the solar system to a period not much exceeding some twenty millions of years; and many of our geological friends protest against so scanty an allowance. The same theory would give us, perhaps, half as much time for our remaining lifetime; but this is no objection, since I perceive no reason to doubt the final cessation of the sun's activity, and the consequent death of the system."

PROPOSING AND DISPOSING.—The often quoted phrase, "Man proposes but God disposes," seems to have originated with Thomas á Kempis (see "Imitation of Christ," ch. xix., where the reference is to Proverbs xvi., 9). It is said that, in a moment of arrogance, Napoleon alluded to this sentence and added, "but I both *propose* and *dispose*." But we cannot credit all that is "said" about public men, great or small.

PROF. CAYLEY [address as President of the British Association, 1883] says, "If there is no conception of straightness, then it is meaningless to deny the existence of a perfectly straight line." Is this true? If it be not, where is the fallacy?

REV. MR. RAINSFORD says that Dr. Cheyne, of Oxford, England, to whom has been committed the final revision of Isaiah, and admittedly the best Hebrew scholar in the University, has published to the world that he has materially changed his views in regard to some matters of which he spoke dogmatically seven years ago.—*N. Y. Tribune*, 31st of January, 1884.

A FOOT-POUND.—In 1849, Joule published the formula that 772 foot-pounds of work are required, to generate as much heat as will raise the temperature of a pound of water one degree. A foot-pound is the amount of force required to raise a weight of one pound one foot from the ground.

THREE CHRISTIAN CHANCELLORS.—It is noted by the *Christian World* that the three last Lord Chancellors of England, the eminent lawyers Earl Cairns, Lord Hatherley, and the Earl of Selbourne, have all been Sunday-school teachers, and well known for their Christian character.

ABOUT BOOKS.

[In this department we shall make mention of recent publications, especially those in the line of our studies. There will not be space for extended review. The name of the book, its publisher, and its price when know, together with a brief state ment of its drift will probably meet the demands of our readers.]

"THE HUMAN MIND: a Treatise on Mental Philosophy." By Edward John Hamilton, D.D. Our readers who have perused the initial article in this number may be pleased to know that they can obtain more from the same able pen. They will find in this volume very much of the old learning in the department of which it treats, put in a very clear style, and they will be engaged by a large amount of new thought. The independence of the writer and his thorough and profound conviction that he is most certainly right will stimulate the faith of the reader. The work is comprehensive, elaborate, original. One other thing should be said: it is better adapted than most books of its class to the reading of the average gentleman of intelligence, who desires to be informed of Metaphysics and yet does not care to make a critical study of the subject. It has already had the warm indorsement of many of our most distinguished scholars. Robert Carter & Brothers.

"THE THEOLOGY OF CHRIST; from His own Words," very correctly describes a work from the pen of the late Rev. Dr. J. P. Thompson, formerly pastor of the Broadway Tabernacle, New York. There is no attempt at a life of Jesus. The teachings of our Lord are supposed to illustrate sixteen doctrines. Not what theologians have said He taught, not what churches have set forth in their creeds as His teaching, but *what* He taught as Dr. Thompson could see it, is set forth in this volume. It is honest work. His able successor, Rev. Dr. Wm. M. Taylor, furnishes a very interesting introduction. Published by E. B. Treat, Office of the *Pulpit Treasury*, New York. $1.50.

"THE UNSPEAKABLE GIFT," by Rev. J. H. Pettingell, A.M., s the most thorough and able presentation we have seen of the views of those who hold the doctrine of conditional immortality. The style is clear and forcible, and the spirit of the book very Christian. The author holds that the doctrine of the natural immortality of man is transplanted from Platonism to Christianity, but is to be found nowhere, even by implication, in the Christian Scriptures, which teach the contrary, namely, that men all perish at death, except those who receive eternal

life through Jesus Christ. Publisher, J. D. Brown, 704 Arch Street, Philadelphia.

"THE LIGHT OF LIFE," by J. L. Batchelder, is a very enjoyable book. The author does his own thinking, on themes most important and timely, and fortifies himself by a very opulent and unusually discriminating collection of quotations from the leading authors of ancient and modern times. We shall make use of this book for the enrichment of our department of "Memorabilia," in CHRISTIAN THOUGHT. The price of the volume is $1.50; to clergymen, $1. It may be ordered from the author, 119 Fifth Avenue, Chicago, Ill.

"THE GERMAN PHILOSOPHICAL SERIES," is the title of a series of books issued by Messrs. S. G. Griggs, & Co., Chicago. It is edited by Prof. George S. Morris. The prospectus says, "Each volume will be devoted to the critical exposition of some one masterpiece belonging to the history of German philosophy. The aim in each case will be to furnish a clear and attractive statement of the special substance and purport of the original author's argument, to interpret and elucidate the same by reference to the historic and acknowledged results of philosophic inquiry, to give an independent estimate of merits and deficiencies, and especially to show, as occasion may require, in what way German thought contained the natural complement, or the much needed corrective of British speculation." The only volume of the series we have seen is "Fichte's Science of Knowledge: a Critical Exposition," by Professor Charles C. Everett, of Harvard University. It is a carefully prepared and very fair and faithful presentation of both the possibilities and the limits of the philosophical doctrines of Fichte. $1.25.

"LUCRETIUS," the old Latin evolutionist, was a real poet. There are passages in the I., III., and V. books of *De Rerum Natura*, which will probably have perennial fame. His philosophical views make him more interesting to the present generation of thinkers, than probably any other Latin poet. While critical students will seek Munro's edition, readers of general scholarship will find the edition prepared by Prof. Kelsey, of Lake Forest University, a very acceptable aid. The notes are very valuable, and the introduction contains a lucid statement both of Epicureanism and of the philosophical theories of Lucretius. (John Allyn, Publisher, Boston.)

"CHRISTIAN MISSIONS" is a 12mo. of 438 pages, by Rev. T. M. Green, Associate Editor of the *Christian Standard*. It gives a very full and trustworthy account of the operations in the

department of missions of the denomination of Christians called "Disciples of Christ." It has an introduction by Rev. Dr. Pendleton, of Bethany College. Probably no other two gentlemen are so qualified to trace the mission work of their own church as Mr. Green and Dr. Pendleton. The volume is issued by the John Burns Publishing Company, St. Louis. $1.50.

"HOME CULTURE," is the title of a carefully prepared volume designed as a self-instructor. Its sub-title describes it fairly as an "Aid to Social Hours at Home." It contains test exercises, with answers, in the various departments of education. So far as we have examined, the work is correct. We see how delightfully it might be used in a family in giving charm and profit to long winter evenings, as the questions and answers are not on the same page. E. B. Treat, New York. $3.50.

"THE MOUNTAIN ANTHEM," is the title of the latest issue in the series of the "Golden Floral" volumes, issued by Messrs. Lee & Shepard, Boston. It contains exquisite illustrations of The Sermon on the Mount.

"TEMPERANCE PHYSIOLOGY," published by A. S. Barnes & Co., is the title of a small, well-printed and amply illustrated manual, by Mrs. Mary H. Hunt, setting forth the bearing of physiology and hygiene on the use of alcoholic drinks, in such a way as to be used in the instruction of intermediate classes and common school. It would be very useful in home-instruction. A. B. Palmer; M.D., Professor in the University of Michigan, vouches for the scientific accuracy of its statements.

One of the clearest statements of the claims of Evolution, and one of the fairest presentations of the scientific difficulties of this hypothesis, may be found in a pamphlet entitled, "EVOLUTION: the substance of two lectures, by Geo. D. Armstrong, D.D., formerly Prof. of Chemistry and Geology, in Washington and Lee University, Va." We wish it a very wide circulation.

"NOTES ON THE OPIUM HABIT," by Asa P. Mezlert, M.D. Third Edition, revised and enlarged. G. P. Putnam's Sons.

"PROGRESSIVE MORALITY" is a very clear and practical Essay in Ethics, by Thomas Fowler, LL.D., F.S.A., Professor in the University of Oxford. It is republished in the Humbold Library, by J. Fitzgerald, 20 Lafayette Place. (15 cents.)

Mr. Whittaker, Bible House, New York, publishes the authorized "Report of the Proceedings of the Ninth Congress of the Protestant Episcopal Church in the United States." It contains the Papers read and the addresses made on a great variety of important subjects. $1.

THE THEISTIC ARGUMENT FROM MAN.

[The Anniversary Discourse in behalf of the American Institute of Christian Philosophy, delivered in St. Thomas' Church, New York, Sunday, January 18th, 1885.]

By Rt. Rev. Samuel S. Harris, D.D., LL.D.,

Bishop of Michigan.

And God said, Let us make man in our image, after our likeness; and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth. So God created man in His own image, in the image of God created He him.—Genesis i., 26, 27.

THAT "the proper study of mankind is man" is a truth which the thinking men of a constructive age have need to recognize and ponder; for a right estimate of what man is and may become lies at the foundation of all social and political philosophy. It is to be considered, I think, the peculiar misfortune of our day and time, that this noble study has been so much neglected. For more than a generation the tendency of popular thought has been in a different direction. The wonderful developments of a material civilization have engrossed the attention and absorbed the energy of the progressive races. In the midst of steam-enginery human agency has seemed to be of less and less account. The machine has seemed more and more to supplant the man. The study of things, and not of ideas; of relations, and not of principles; of forms and combinations, and not of the power which animates or sustains them, has made the age in which we live, with all its splendor of material achievement, a superficial age in which the true dignity of man and the true sanctities of human life are often obscured or forgotten. To this is due in large part the notorious decay of statesmanship; the shallowness of much of our contemporary thinking; the empiricism which is the reproach of the learned professions; the desecration of home and of marriage; and the disregard of human rights and human duties, with its consequent alienation of

classes, which is likely at any moment to lead to conflict and disaster. For these evils the only remedy is to call men back to a sense of their true interests—to a just estimate of man's dignity and destiny. For man is of right the lord of all beneath him, and the witness for all above him—designed to be earth's sovereign and God's representative; and unless we know him in some real sense we cannot understand the world and time, to say nothing of eternity and God.

But beyond all question a right estimate of what man is and may become must lie at the foundation of all Christian Philosophy. It is therefore altogether appropriate to the interest of this anniversary service that I should invite you to a brief study of man's dignity and place in nature. And unless I am greatly mistaken, Christian thought is at this moment engaged in transferring its forces to this ground as the ground from which in future it will wage a more aggressive and enterprising conflict with materialism. Already more careful reasoning and more exact definitions have rescued Christian thinkers from their vague and undefined dread of anthropomorphism, and of what the Duke of Argyle calls anthropopsychism; and we are now beginning to see that it is by looking reverently into the soul of man that science may best learn the meaning of the world, and also attain to some vision of God. It is in the hope that I may contribute something, however little, to the establishment of this method of dealing with the religious nescience of materialism, that I have chosen man's dignity and place in nature for my subject this evening; and for a text I turn to this venerable record of human history, which tells us of man's beginning, by what power and for what purpose he was created, after what image he was fashioned and into whose likeness he was designed to grow. "And God said let us make man in our image, after our likeness; and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth. So God created man in His own image, in the image of God created He him."

It is no part of my present purpose to discuss the manner of man's creation. As Christians we need not be at all disturbed,

if, in the course of scientific investigation, it shall be established that man as a physical being is the result of a long process of evolution—the same process through which all the rest of the physical universe has been builded. The grandeur of God's creative act would not be obscured but only enhanced, were we taught to regard it, not as having been exercised in a moment or by a single fiat, but as extending through ages of development, and ending with man as the crown and consummate flower of creation. The modern theory of evolution is not yet proved. There are many scientific philosophers, among the very greatest, who believe, like the late Professor Agassiz, that it never can be established; but even if it should be established as the true account of man's origin as a physical being, it will not be in conflict with Christian truth or with the true meaning of this Divine Word. For man is more than a physical being. No matter from what standpoint we regard him, we find in him what no physical philosophy can ever co-ordinate with what is beneath him, and what therefore no mere physical philosophy can ever account for. In him we find certain characteristic faculties and powers which mark him as distinct from all other earthly creatures, in virtue of which he has, and of right exercises, dominion over them; and these characteristic faculties and powers distinguish him as an intellectual, moral and spiritual being. In the great transaction of man's creation, then, whether it was evolutionary or instantaneous, there was an epoch-marking moment when a new factor appeared; when a new and supernal entity made its august appearance as a visitant from another world; when a power from on high for the first time touched the organic and material and took up its abode in this lower sphere; and that supreme moment is here told of when it is said that God breathed the breath of life into man's nostrils and he became a living soul. And when we study that soul we find that it bears the impress of its divine origin; that it was fashioned not according to any earthly pattern, but after a pattern in the heavens: we read without wonder that it was not in the image of any earthly existence that man's soul was made, but that it was made in the image of God. And this was done not without deliberate counsel and purpose. We are struck, in

reading this ancient narrative, with the difference between this act and all that preceded it. All former things seem to have arisen, as it were, in accordance with some general plan—the light, the firmament, the stars, the fishes, the cattle, the birds. But when it came to the creation of man, the council of the eternal Godhead was solemnly convoked. The sublime purpose of reproducing here on earth a being in the image of the invisible God was meditated and announced. After the pattern of Godhead the soul's manhood was fashioned and made; and the great fact is here recorded. "So God made man in His own image, in the image of God made He him."

Therefore it is that the soul is the man. In man's mental, moral and spiritual nature his true manhood lies. In this world man has a body, but he is a soul ; and the soul is the real man. Undoubtedly his physical nature is not to be despised. With all its frailties it constitutes a splendid equipment for the human spirit. All creation moved by steady gradation upward to man as a physical being, and in him it reached its summit and consummation. It is one of the latest and most authoritative announcements of the evolutionary school of scientific thinkers, that man is not only the loftiest and noblest product of evolution, but that he is and shall be the last ; that in him the principle of natural selection has given place to another law, which has forever closed the ascending series of species, and that there can be, therefore, no nobler creature on this earth of ours than man. And when we consider man merely as a physical being, how matchless he is ! Erect and free, his very attitude is that of lordship. What a piece of work he is ! "In form and moving how express and admirable !" Who shall say or sing the marvels of the "human face divine"? Who shall match the wondrous powers of the human hand ? In all the boundless range of art its skill gives form to human thought, and makes it glow on canvas or breathe in marble. With the hand man wields the flashing sword in battle, and soothes the fevered brow of pain ; with the hand he fells the giant oak, and by its tender clasp cements the bond of friendship. In all that he does the hand of man is the instrument of power, of love, of blessing. Not less wonderful is the voice of man—the organs

of speech, the power to make articulate sounds and fashion them into words, those airy messengers which tell the secret thoughts of soul to soul, and make up that marvellous thing called language. And yet even these powers belong to man only because he has a soul ; these exquisite organs and faculties are simply the agents by means of which the soul expresses itself and holds communion with the outer world.

Man's true nature, then, that which constitutes his true manhood, is mental, moral, spiritual ; that which he is in distinction from all other beings known to him here ; which constitutes him what he is—a man. As such he is able to apprehend the environment by which he is conditioned, and to look through it to a higher state of existence. As such he is able to will what is right, and to choose what is good. As such he is able to love the ideal and so by voluntary aspiration to rise toward it. In a word his manhood is his personality as an intellectual, moral and spiritual being.

It is a great truth that every soul is unique in its inmost personality. Each differs from every other, stands in its own lot, bears its own burden, goes to its own place. The law of generation, transmission, inheritance largely shapes and determines man's physical nature. But the soul's individuality is original and underived, because each soul is a fresh creation. The body is begotten through generation. The soul of each child that is born comes direct from the creative power of God. I need not now discuss the old question between the traducianists who assert that the souls like the bodies of all men are derived through natural generation from Adam, and the creationists who assert that while the physical nature is so derived, each soul is a separate creation. Suffice it that the last view is the only view that is tenable. No doubt the new-created soul is conditioned by its environment. Enshrined in a body that inherits evil, the soul is conditioned by that evil; hence we have original sin, inherited tendency, transmitted bias, and other peculiarities of temperament and temper. But the fact remains that each soul, however conditioned by its body, is the result of a fresh creative act, and comes directly from the power and love of God. Though we may not too literally accept the poet Wordsworth's transcen-

dental view, yet there is a real sense in which we may adopt his noble lines and say—

> "Our birth is but a sleep and a forgetting;
> The soul that rises with us, our life's star,
> Hath had elsewhere its setting
> And cometh from afar.
> Not in entire forgetfulness,
> And not in utter nakedness
> But trailing clouds of glory do we come,
> From God who is our home."

Therefore it is that in spite of all the associations that entangle him here, man is the master of his own destiny. No matter how squalid the environment of his birth, nor how base and ignoble the lot to which he is born; no matter how unknown or unworthy the name which he inherits, nor what swarthy hue barbaric suns may have burned upon the cheeks of his ancestors; the soul of every man, being a new creation of God, ought to be free and equal among his fellows. It is in this fact that I read the charter of human rights and human freedom. In this I discern the falseness of all class distinctions and barriers of caste that would separate man from man. In the kingdom of souls there are no inherited degrees of honor or shame. Each soul is free and fully entitled to the place which he can honestly win and honorably hold. Therefore man is a responsible being. He comes into this world a sovereign soul with power to determine the quality of his own life and action. And this responsibility he cannot abdicate any more than he can obliterate his own individuality. He cannot ease himself of it or share it with another. There is infinite pathos and pitifulness in the thought of man's lonely individuality, but there is grandeur too. In the solitude of his individuality each soul is a crowned and sceptred king. Day by day and hour by hour he must determine the awful issues of right and wrong, of life and death, as they arise, and no man and no angel can interpose between him and his dread responsibility. In a deep and real sense he must think and choose and live out his life alone, even as he must go alone through the dark valley and shadow of death, to that Judgment which shall disclose what manner of man he has made himself to be in the sovereign freedom of his soul.

In this sovereign individuality man is endowed with three original powers, which he must exercise, for the right exercise of which he is responsible, and in the right exercise of which his true dignity lies: the power to know, the power to will or choose, and the power to love. And first, of the power to know. It may be said that in man nature first became conscious of itself. No being lower than man is able to take cognizance of the world's meaning, to drink in its beauty, to appropriate its good. He only is able, through observation and reflection, to understand the laws of nature and the sequence of history. He alone can discern and appropriate creation's power and joy—the mountain's grandeur, the landscape's beauty, the majesty of night, the glory of day. For him the aurora spreads its fitful light, and the rainbow lifts its lovely form. For him the morning blushes in gladness over the eastern hills, and the day departs with splendor through the portals of the western sky. For him the flowers bloom, and all the beautiful things of earth; not for the beasts which see and heed them not, but for man, for the angels and for God. Therefore man is creation's lord. Fast as his knowledge expands his power grows. He makes the rivers and the seas his highways, the lightnings his messengers, the winds and the currents his toiling messengers and servants, because he has the power to understand and therefore to use them. Not only so, but from these he is able to reason to higher things; to look into the mirror of his own soul, to read the majestic secrets that are reflected there; and so being conscious of the world and of himself, to become conscious of God. Yes, the power to know is the signature of divinity in the soul of man. The quest for knowledge is a divine quest. The soul that engages in it is exercising one of the royal prerogatives of its nature. All true seekers after truth are seekers after God.

Next, man has the power to will, to choose freely between good and evil. Perhaps of all his powers this is the most characteristic of him as a man. For the brute has no such power. The brute is under the absolute control of instinct. When an object of fear or desire is placed before a brute it instinctively seizes it or flies from it. But man has a peculiar power of determining his own actions for himself, and of choosing freely between

right and wrong. Passion may say of a proposed action, it is desirable or undesirable. Appetite may say it is fair or repulsive; but conscience may whisper it is right or wrong, and man has power to heed conscience in defiance of passion and appetite; to say I will do right at whatever cost; to say I will do this thing not because of fear or desire, but because it is right, and I will refuse to do that thing because it is wrong. The power to do this belongs of right to every soul. No squalid surroundings at birth have ever been able to banish it. No inherited languor or taint in the blood has ever been able to steal it away. The man himself may sin it away; but until it is forfeited by his own mad act, it belongs to every soul. And this it is which makes the soul of man so great, which makes him greater than all the universe besides. For all things else are held in bondage to necessary law. The wandering comet is held in the firm leash of law, as is also the wild hurricane that sweeps across continents and careers over foaming seas. The iron hand of necessity hurls the cataract, and paints the lily and shakes the aspen in the breeze. In all the world there is only one thing that is free, and that is the soul of man. No external force or power, no inherited tendency or bias can coerce his thought, his choice, his affection. Made in God's image he has the sovereign power of self-determination, and can act not from instinct or caprice or impulse or passion or any kind of necessity; but can freely do the right because it is right. This is the characteristic power and glory of a man.

Finally, another characteristic of the human soul is the power to love the ideal. This too is part of the equipment of a sovereign nature. Not passion, nor desire, nor longing, nor any sickly sentimentalism; but the outgoing of man's affection from himself toward an ideal beauty or grace, in a generous, unselfish, noble desire to honor and bless that ideal—this is human love. It is the inspiration of all noble endeavor, the principle of all aspiration, the spirit of all worship, this power, strongest in the strong, noblest in the noble, the power to love and so to approach the ideal beauty, goodness, grace—in a word, the power to love God. Time fails me to speak of it to-day as I would. Let it suffice now to say that this is man's pre-eminent spiritual

faculty. Blindly, fitfully it often gropes and even grovels here, wasting its wealth of tenderness often on objects most unworthy: but its highest earthly exercise is Christian worship, and its loftiest fruition will be the beatific vision when man shall see the King in His beauty, and behold the land that is very far off.

If now my object were simply didactic, I might here conclude by pointing out the obvious lesson to which our thought has conducted us; which is that man's true dignity lies in the right use of these noble faculties which constitute the equipment of his nature. It is true indeed that man is fallen from the high estate in which he was originally crowned and sceptred. But it is also true that through God's grace he has been redeemed, and in the great Redeemer's life and love we not only see the measure and the standard of what he ought to be, but treasures of grace provided and freely offered by means of which man's destiny can even yet be fulfilled. From these august though familiar considerations, however, I now turn aside, to inquire what witness man bears, being such as he is, to the wisdom, the power and the love of his Maker and Redeemer; and what testimony man is able, in the light of his own nature, to discern in the manifold movements and operations of the universe, to the wisdom, goodness and love of the same God.

The answer to the first of these questions is so familiar that I need not dwell upon it at much length. In man's mental and moral constitution we are able still to trace, spite of all the defilements and disfigurements of sin and worldliness, the majestic outline of Him in whose image he was made. And when we rightly survey his nature, and read the language of its hopes, its aspirations, its fears, we find that the existence and accessibility of a Supreme Being are clearly postulated, of whose wisdom, goodness, love, ours is the reflection and homologue. The theistic argument from the nature and constitution of man has been urged with much confidence and force; but it needs to be restated. It is capable of being wielded with far more effect in this day when men are not afraid to think of God in the terms in which He revealed Himself in Jesus. That there must be a Supreme Being, intelligent, moral, spiritual, is a necessity of thought. We cannot conceive of our own existence without

this ground to rest upon. And we are not only able to argue, but we cannot rest short of the conclusion that the God of our thought is a God of wisdom, of purpose, of love. If there be no such archetypal being, then man is a more profound enigma, a more unaccountable mystery than any being that theosophy has dreamed of or theology has named. But the God revealed in Jesus is the necessary end of all rational reflection upon the nature and constitution of man; and the soul when it is interrogated is religion's majestic witness to eternity and God.

There is, however, another theistic argument to be derived from the study of man's nature, which is not so familiar, though it is now beginning to be much insisted upon. It may be called a re-statement of the old argument from design, from an anthropological standpoint. It may be briefly stated thus: Man, being what he is, is peculiarly related to two worlds. In his physical nature he belongs to the system around and beneath him. In his mental nature he is essentially differentiated from that system, being a free, self-determining personality, with power to apprehend, to interfere, to rule the lower world. In a very remarkable way he is able by the interference of his intelligence and will, to act a sovereign and, as it were, an arbitrary part towards nature. Within certain limits he is able to suspend its laws, to break up its uniformity, to make it serve his will and purpose. So interposing, he is able to act the part, within a limited sphere and for his own purposes, of Orderer, or Providence. From this the great truth is to be discerned that nature, with all its majestic uniformity, is yet obedient to Mind, and yields to moral purpose when brought to bear upon its movements and operations. But this is not all. Though nature is not, like man, either free or intelligent, yet all its operations are seen to rest upon and to be sustained by intelligent purpose. Man, then, is able to take the knowledge which he has of his own intellectual, moral, and spiritual powers, as a clue with which to explore the mysteries of nature. He sees the evidences of intelligence—a marvellous intelligence—as directing the characteristic actions of plants, of animals, of birds. In the wonderful instincts which many of them exhibit, he sees unmistakable evidence of purpose reaching forth to unseen ends. In the development of organs and species,

he detects aspirations, strivings towards the realization of unattained ideals. Where does this intelligent purpose reside? Evidently not in the plant or animal, the wandering root, the circumnutating tendril, the insect passing through its characteristic metamorphosis, the water-fowl winging its uncharted flight through the pathless sky, or the beast watching for its prey, or eluding evil. All these are equally devoid in themselves of the characteristics of a self-determining personality. Each one is the unconscious, unquestioning servant of a power which none of them is able to apprehend or acknowledge, but which man is able to apprehend because he discerns in it an intelligence, purpose, aspiration like his own. Whence is it, this intelligent, moral, aspiring power, that he sees doing such wonderful, unerring work? Must it not be the operation of some all-pervading, all-controlling Mind or Spirit like his own, only infinitely more powerful, more perfect, more wise—some intelligence that never slumbers; some moral purpose that never halts, that makes no mistakes; some far-seeing goodness and love that discerns the ideal goodness, perfection, grace, and moves steadily towards it with the process of the suns? In reaching this great conclusion man will become for the first time the interpreter of nature, reading its meaning in terms of Mind, and so catching a vision of the Universal Mind that orders all things. So will he be the universal seer, nature's prophet, priest, and king, ruling the world beneath him, mediating between the seen and the unseen, seeing the Divine not only in the human but in all things, and so bearing witness to God.

That this is the great consummation towards which the quickened and awakened energies of Christian Philosophy are now striving and shall soon conduct us, I do not doubt. Already it is beginning to read and define nature's forces and powers in terms of mind. When it shall be able to do this completely and fearlessly then the long conflict between religion and science will draw to a close. For ages there have been foreshadowings of this great reconciliation. Prophets and seers have long foreseen and foretold the peace which is coming in the age of gold —like Shakespeare, immortal seer, whose book was the mind of man; and Wordsworth, nature's prophet, who looked with open

vision upon the hidden beauty, the secret grace, the living soul of the world; and Bacon, illustrious high priest of science, who was the first of all the great thinkers of earth who caught the "true vision of the footsteps of the Creator imprinted on His creatures." How can we better conclude this brief meditation than by recalling the prayer with which he ushered in his "New Organon:" "Therefore do Thou, O Father, who gavest the visible light as the first fruits of creation, and didst breathe into the face of man the intellectual light as the crown and consummation thereof, guard and protect this work which coming from Thy goodness returneth to Thy glory. Thou after Thou hadst reviewed the works which Thy hands had made, beheldest that everything was very good, and Thou didst rest with complacency in them. . . . Wherefore if we labor in Thy works with the sweat of our brows, Thou wilt make us partakers of Thy vision and Thy Sabbath. Humbly we pray that this mind may be steadfast in us, and that through these our hands and the hands of others, to whom Thou shalt give the same spirit, Thou wilt vouchsafe to endow the human family with new mercies. These things we commend to Thy everlasting love, by our Jesus, Thy Christ, God with us. Amen."

But what avail inadequate words to reach
The innermost of Truth? Who shall essay
Blinded and weak to point and lead the way,
Or solve its mystery in familiar speech?
Yet, if it be that something not thy own,
Some shadow of the Thought to which our schemes,
Creeds, cult, and ritual are at best but dreams,
Is even to thy unworthiness made known,
Thou may'st not hide what yet thou should'st not dare
To utter lightly, lest on lips of thine
The real seem false, the beauty undivine.
So, weighing duty in the scale of prayer,
Give what seems given thee. It may prove a seed
Of goodness dropped into fallow grounds of need.

—*Whittier.*

THE LAW OF CORRELATION IS AS APPLICABLE TO MORAL FORCES AS TO PHYSICAL.*

[A Lecture delivered before the Summer School of Christian Philosophy, Richfield Springs, N. Y., Tuesday, July 19th, 1884.]

By William H. Platt, D.D., LL.D., Rochester, N. Y.

THE most terrible certainty in all the economy of nature is the law of equivalence. Correlation is its method, which we are to consider to-day. The light of science that reveals the behavior of forces in matter also unveils and emphasizes the awful law of moral exchanges. For so much wrong we get an equivalence of suffering. But if we measure the moral magnitude of the cause by the multiplicity of their effects, and their undying continuance, we shall see that though a cause is one thing, it is vast. In physics, we can see so much of one force given for another; but in moral movements the equivalence of a wrong is never full. Men reap one hundred grains for the one they sow. That which we measure to others they measure to us again; good measure, pressed down, and running over, is returned to us again. Responsibility transcends knowledge. Its limitations wander through a moral economy of the ages, untraceable to finite intelligence. A cause is an immortal thing. A wrong is

* To construct the diagram upon which this lecture was delivered, draw a rectangle, say, four inches high and two inches wide: draw a diagonal from the upper left to the lower right angle, and another diagonal from the upper right to the lower left. In lettering the figure, begin with A at the upper left, B at the upper right, C at the intersection of the diagonals, at the centre, D at the lower right, and E at the lower left. By two points divide the line A and B into three equal parts, and from these two points draw two radii to C at the centre. Letter the one next to A, *a*, and the other *b* next to B. Write in the triangle A, C, E, the word, State. In the triangle B, C, D, write the word, Philosophy. In the angle A, C, *a*, write the word, Mythology. In the angle *a*, C, *b*, write Judaism. In the angle *b*, C, B, write Ancestral Worship. In the angle E, C, D, write the word, Christianity. This diagram will illustrate the direct and inverse correlations of the Lecture.

an ever-parturient womb, like that of Milton's hag at the gates of hell, from which a life-repeating progeny comes to curse and die. A felony is social suicide. Every act has its equivalence in either compensations for suffering virtue and acts of kindness, in reparations for moral injuries, or retributions for injustice. But we have no telescope with which to look on to the hidden end. Be sure your wrong doing will find you out and drive you into a corner.

"'Tis the eternal law that where guilt is, sorrow shall answer it."

Nature neither sleeps nor dies. For every injury she returns a blow. As you twist the twig, so must run the sap of the tree. All beginnings are solemn, but bad ones "cast their shadows before." Punishment may seem to be postponed; but, as in the constitution of man, matter and morality are each the avenging Nemesis of the wrongs of the other—punishment is sure to come. The nature of things, as seen in correlation, admits of no escape

When heat is correlated into electricity, we know what the force is which is to be re-made, or changed into another. The line of correlation is distinctly under our attention, and can be traced; so it must be in tracing the changes of social or political events. We must know the raw material upon which the work is to be done. We must settle in our own minds the state of life, character and institutions which are to be remoulded by correlative forces. Hence, we must go back to the beginning as far as history lights the way, and see how and with what we start, that we may see how and with what we end. Let us begin at Rome.

Rome was first a sacerdotal kingdom, then a Consular Republic, and at all times a power of will, aggression, conquest, and dominion. It correlated barbarians into rulers, and rulers into despots. If we bring the lines of political force into view at the founding of Rome, 735 B.C., and follow their direction down to Cæsar and Christ, it is evident that the sacred forces lose proportionately as the secular forces gain.

What is the hope of the human family in its great social movements? In building up this globe, over the ruins of successive physical cataclysms, we ever find nature stepping forward and upward. Are the moral and spiritual interests of man out-

side of this law of progress? What have we seen in the past, and what may we expect in the future?

I.—ALL RELIGIOUS AND CIVIL MOVEMENTS OF PAGAN CIVILIZATION GO DOWN AT THE COMING OF CÆSAR.

Taking our stand back at the beginning of our era, we find ourselves at an eminent point, dividing time and events. In Cæsar end all the secular lines of ancient civilization, and in Christ begin all the sacred lines of our present civilization. The priest, the warrior and the philosopher are the great actors in progress, and Cæsar saw the lines of revolutions and of thought, of ancient creeds and fanciful worships of the dim past, ending in nothing at his feet.

It appears that upon the coming of Cæsar and Christ converge, from the ages before them, the lines of five great factors of civilization, viz.: ancestral worship, Judaism, mythology, philosophy and events entirely secular and political.

(1) JUDAISM.

Thousands of years ago the Monotheistic Hebrew and the Polytheistic Aryan, probably one race, went out from their original hive in Central Asia—the Hebrew, working out its civilization under the worship of its one God, made its home and history along the eastern shore of the Mediterranean Sea; the Aryan race, to which we belong, working out its social ideas under the worship of its many Gods, ancestral and Olympian, dispersed toward its home in the West and the North. From these two religions, ancestral and Judaic, have issued two diverse conditions, uniting, under the influence of Monotheism, at the coming of Christ, in one broad, enlarging sea of modern civilization. For the present discussion, the Hebrew element, which had become corrupted and weakened at the coming of Christ, will receive no special consideration apart from its connection with Christianity.

(2) THE WORSHIP OF ANCESTORS—THE PENATES AND LARES.

Probably the most ancient influence which became entirely extinct at the coming of Cæsar, was that of the worship of ancestors. This is still the religion of the Chinese, and with it their civilization has been stationary.

Twenty-five hundred years or more before Christ, it was the belief of the Aryan race, from which the Greeks and Romans descended, as well as other Europeans after them, that the father of a family, as its generator, was its creator, to be obeyed as a king during his lifetime, and adored as a god at his death. Indeed, Father, King, and God, were one. His soul was supposed to be buried with his body, and to take perpetual possession of the field containing his tomb. To satisfy the hunger and thirst of this soul, now become that of an ancestral god, food and wine were to be regularly offered. To neglect or fail in this sacrifice would subject the dead to dreadful torment. None but blood kin were permitted to make these offerings. The presence of a stranger at these services was profanation. The offerings were to be made by the family, in the presence of the family only, and only to the family ancestors or gods. This was one religion, and perhaps the oldest.

As the era of the Roman Republic was one, not of philosophy, but of persistent struggle of class with class, and tribe with tribe, we can see, in that struggle, moral principles, as suggested by a state of war, concreting into law, settling at the same moment both the *civil status* of citizens and the regulation of the *domestic relations*.

Status was the first to feel the correlative movement of early society. The Patrician was forced down from the pedestal where Ignorance had placed him as a god giving all law, and the Plebeian, from having no recognized rights, rose to the dignity of a free and equal citizen, possessing all rights. He extorted the laws of the Twelve Tables from the Patricians. He made himself Tribune, Consul, Censor, Prætor and Pontiff. He was recognized, as he should have been, as a man with the rights of a man. But, for every change in *status*, there was a correlative one in

The family. Although love of power and of money are strong yet, in no one phase of society do the laws of moral conduct come more into view than in the regulations of the domestic relations. The relation of the sexes shows most sensitively the morals of the race. Shall it be managed by religion or by logic, by the conclusions of mere reason or the awful sanction of religious

love, awe and adoration, or all these? Will lust listen to reason, or, in strongest moments, even to religion? In what direction can we look for its master? What power can so impress the mind as to hold its lawless demands in subjection? The governing power must be one that prevents its inceptive thought. The mind, once inflamed, is uncontrollable. Can mere reason take command of the mind, either to anticipate or to regulate and moderate this animal despotism over mankind? How was it disciplined among the earlier people, and how under the latter? Was there not a steady correlation of purity into impurity all the way down? In average human beings, says Mills, passion predominates over reason.

Everything that can be accepted as history respecting the founding of Rome by Romulus, 735 B.C., shows the prominence of the family unit. The State finally absorbed or substituted itself for the family. As the purity and influence of the family declined, the corruption and influence of the State correlatively increased. The transmutation is obvious and complete.

The characteristic of the family is purity; that of the State is, at most, order. The family is disciplined. The State is governed. The oversight of the family is personal, individual, early, private and immediate. The supervision of the State is political, incomplete, remote. The one has to do with the formation of habits, the other with habits that are formed. The State demands obedience for itself, but demands morality for the citizen as citizen, and not for the man as man. But if morality has only public ends, then a man need have only so much of it as the public requires. Morality for the sake of morality will not be the aim. If there be no such thing as right and wrong, except as prescribed by the rule of public expediency, then morality is an arbitrary or conventional matter. But the law of correlation moves to its end in spite of public opinion. If man works with this universal law, it is all right; but if he works against it, he must take the consequences. There is no punishment for the right-doer, and there is no escape for the wrong-doer. Correlation is everywhere vigilant and effective, in each man, and in all the world, putting right where man puts wrong. Man is ever transferring or correlating power from one to the

other side of himself, making himself generally better or generally worse. All growth is correlation, one thing increasing in one direction as something else is decreasing in some other.

The breadth of sacred force especially as exhibited in the ancient religion of Ancestral Worship, placed before us for examination by the above diagram, at the founding of Rome, is seen in the line from A to B. This may be said to be its maximum. At C, sacred force was at its minimum. Just the opposite was the line of secular force. At A it was at its minimum, and at C its maximum. Action and reaction in sacred forces, no less than in physical, were equal and opposite. The shrinkage of the former and the increment of the latter exactly coincide. One was in the inverse ratio of the other. The maximum of one was the minimum of the other, and every movement of civilization shows it.

In order to see clearly how social morality declined from Romulus to Cæsar, we must understand more perfectly the religious beliefs and domestic constitution of the people we study. Society is demoralized not alone by war and vast wealth. No loss can be greater than the loss of faith. The Aryans, Greeks and Romans saw this when they gave up their religion, poor as it was.

(*a*) MARRIAGE AS A SACRAMENT.

It was the belief of the ancient Aryan race, as admirably shown by De Coulange in his "Ancient City," that the father, the generator of a family, was its creator, or its god, and that when he died his soul was buried with his body, and needed for its happiness the perpetual sacrifices of bread and wine at the hands of his descendants, and, of course, from none but his descendants. Hence the family altar, the family property, and the inalienability, in those early days, of family estates. When a girl married, her father, or the male head of the family, as a god, gave her away to her husband as to a god of some other family.

The giving away of the bride, from which our custom has descended, was the sacramental gift of a daughter as Priestess, and veiled as a Priestess, by the family gods of her fathers, to serve as a wife and Priestess at the altars of her husband's gods.

The sacramental offerings were bread and wine. As none but members of a family could participate in the family worship to dead ancestors, and which was conducted in the strictest privacy, a man had to adopt his wife as his daughter, in order to enable her to be present at his own family altar. Hence, she took his name. Under this fiction she could be present and participate in the worship of her husband's gods, or ancestors; but, as she could not have two sets of ancestors, she could no more worship her own. No one could have two family religions. Indeed, sometimes these family gods became involved in family feuds, and led the battles that occasionally occurred. It was in allusion to this change of gods and people that Ruth said to Naomi: "Entreat me not from following after thee. Thy people shall be my people, and thy god my god." A marriage was, therefore, a change of church. The bride was led to the altar by her father or oldest brother, and there, in the rigid privacy of ancestral worship, the groom being absent, was separated from the service of her own gods, as their Priestess, and given to the service of the gods of her husband. Henceforth she could be no more present at the worship of her father's gods, because she had been adopted as daughter in another family. At the door of her father's house the groom received her, and led her to the tomb of his gods, and there both poured the sacrificial wine, and broke the sacrificial bread, and offered them to his dead for their benediction. We now offer them to living friends.

This sacred marriage conferred the *Patria Potestas*, or Paternal Authority. This tremendous power of the male representative of a family, conferred by the sacred marriage alone, and which is so unaccountable to modern thought, existed in the conviction that the father was a god. No other creator was known. Hence he had over his children the absolute power, *vitæ et necis*, of life and death; and this power lingered in the law for centuries after the ancestral worship had ceased. Also, by this sacred marriage to one prospectively a god of the family, the wife becomes subject to his divine power, called *The Manus*, or Marital Authority. That is, her property, life and children were his, as if he were her only god. This supposed divinity of the father must be kept in mind in every attempt to understand

the domestic relations and civil institutions of the ancient Aryans, from whom the Greeks and Romans descended.

(*b*) MARRIAGE BY MERE CONTRACT.

Now this *Manus* of the husband over the wife was acquired in one of three ways:

First—Confarreatio.—In the case of the patricians, who alone had altars and divine ancestors, the sacramental marriage we have mentioned, was called *confarreatio*, or the eating of the sacred cake and pouring the sacred wine at the tomb of the husband's ancestors. These ancestors, as said before, were supposed to convey to him, as a god, absolute power over his wife, whom they accepted *loco filiæ*. Marriage, in patrician families, was a sort of ordination or adoption, necessary for the wife to become a priestess of her husband's sacred fire, to which she was not attached by birth. It had the effect of a new birth; it changed her gods, her worship and her privileges. Old relations of her birth had passed away, and all relations had become new.

Second—Coemptio.—The plebeians obtained the *Manus* or marital power by purchase. In all plebeian marriages, the conjugal union rested only upon the mutual consent of the parties (*mutuus concensus*), and on the affection which they had promised each other (*affectio maritalis*). No formality, religious or civil, took place. The patricians did not regard this as marriage at all; as, in their eyes, the marital and paternal authority flowed only from the religious ceremony which initiated the wife into the worship of the husband. With them, marriage had only religious ends—that is, a posterity to keep alive the worship of the ancestors. As the patricians were the only class that had ancestors and a religion, so they only had laws, because laws were the supposed will of these gods. This state of things could not last. As the plebeians increased in numbers and wealth, the private law of the patricians had to be more and more extended to the plebeians. As to marriage, though the plebeians might marry by mutual consent, they could not have that power over their families that the patricians had over theirs; so a formality was devised for their use exclusively, which, in civil affairs, had the same effect as the sacred marriage of the patri-

cians. They had recourse as in case of the will, to a fictitious sale. When the plebeians ultimately acquired the right of intermarriage with the patricians, the husband bought his wife—*co-emptio*—and so obtained the *manus*, or marital power; but it was the *manus* of a vendee, not that of a god, as in the case of the patricians. Co-emption was no part of the marriage act, but entirely subsequent to it, to confer upon the plebeian husband that marital power which the patrician obtained by the *sacra*.

Third—Usus corresponds to *co-emption*. One year's uninterrupted marital companionship conferred upon the plebeian the *manus*, or marital power, and the *Patria Potestas*, as much as the *sacra* did upon the patrician, or the plebeians mode of *co-emptio*. When the plebeians, by the Canuleian law, obtained the *connubium*, or right to intermarriage with the Patricians, 445 B.C., marriage by mutual consent, followed by *co-emptio*, and the *usus*, became the only marriage, in all cases, between plebeian and plebeian, and plebeian and patrician. Although the law gave the plebeian the right to intermarry with the patrician, that law could not confer upon him the *sacra*. The *manus* must be obtained as before, in exclusively plebeian marriages, by *co-emptio* or the complete *usus*. The union of a patrician and plebeian was a mixed marriage, disapproved of by the pride and conscience of the patrician, but a practical result from this continuous displacement of sacred and the substitution of secular force. The legal device of the *usus* was the natural result of these secular marriages by mutual consent, and originated under these circumstances: The patrician marriage by the *sacra* was a relation supposed to be constituted by the gods, and, of course, indissoluble; but a marriage by mutual consent only was made by the parties, and might as easily be unmade. But when followed by *co-emptio*, or the full *usus*, the husband purchased the *manus*, or acquired it by a lapse of time in the *usus*, and all right over the wife's property, which, upon separation, he retained. So, to prevent his acquisition of this power, the wife, in the *usus*, absented herself three consecutive nights from her husband's home, thereby breaking the *usus;* and so, in case of separation, the wife retained her property as a *femme sole*. Purchase or *co-emptio* made the husband's *manus* complete and irrevocable.

But the *usus*, with the three nightly absences of the wife, became the most common mode of conjugal union, as it defeated the husband's *manus*, that otherwise would obtain, and left the parties free to continue or discontinue the union at their pleasure, each retaining all rights over their own persons and property.

The paternal authority was entirely gone when the marital authority was gone. Pliny says that in his day the Roman youth thought they knew everything. They were conceited; they revered no one: they imitated no one, but were a law unto themselves: *Statim sapiunt; statim sciunt omnia; neminem verentur; imitantur neminem; atque sibi exempla sunt.*

When this condition of domestic life was reached the secular and the sacred forces were completely correlated or exchanged; marriage was a capricious and transient relation, and social morals rapidly declined. It is said by Seneca, that even before the time of Cæsar, women told their ages, not by their years, but by the number of their marriages. *Non consulum numero, sed maritorium annos suos computant.* The diagram suggested will enable you more distinctly to understand how the maximum of sacred marriages was the minimum of the secular, and the maximum of the secular was the minimum of the sacred. The supposed approbation of the ancestral gods had been the inspiration of the one, and the changeful pleasure of man was the secret of the instability of the other. At Cæsar culminated all the forces of ancient Aryan civilization then in Europe. Servius Tullius, 500 B.C., had secularized the ancient sacerdotal constitution of Romulus and Numa. The human element of civilization had entirely correlated or exchanged places with the element before supposed to be divine. It was the beginning of the end. From the altars of faith, superstition if you will, mankind turned to the darkness of universal doubt, and the lights of the sacred altars went out in a midnight of horrors. Servius dethroned the ancestral gods, and Cæsar enthroned a line of despots.

At Cæsar the old civilization ends, and the new begins. The moral and the immoral are ever in ebb and flow. Of one thing we may be sure, that no prescription runs against the omnis-

cience and omnipotence of a correlation that throbs and pulsates through its eternal eons, holding in trust the ultimate perfection of all things perfectible. The command of nature is "obey or perish." Her creed is Progress, and her psalm is Hope.

(3) MYTHOLOGICAL RELIGION.

This ancestral worship led to the establishment of altars, ceremonies and social distinctions. But the common people, who were not land-owners, had no homes, and so no domestic altars and no domestic worship. These, for the want of other gods, made gods for themselves out of the elements of nature, and worshipped the wind, the sun, the water, the fire and the air as gods, and united them into a synod of gods on Mount Olympus. This was a religion of mere fancy, and having no hold upon the conscience and the affections, was simply a ceremonial religion of fear and of public policy. Morality was not its aim. In addition to his ancestral worship, the Patrician had, with the Plebeian, his mythological god, also; but mythology had no important influence upon civilization. Both of these religions, the ancestral worship of the Patricians and the mythology of Olympus of the Plebeians, were in full credit at the founding of Rome, 735 B.C. From that day up to the Empire of Cæsar and the coming of Christ, they gradually declined. They were between the upper mill-stone of philosophy and the nether mill-stone of secular force. The Patricians claimed the exclusive right to govern because they had the lines of ancestral gods: indeed, were gods themselves in prospect; at which the philosophers laughed, and the common people gnashed their teeth.

(4) PHILOSOPHY AND CIVILIZATION.

Contemporaneously, both the secular force of the civil ruler and the skeptical inquiries of philosophy began to mould events. As the ancient religion decreased, these two—revolution and philosophy—increased. As to secular force, we see that both in Greece and Rome the political instinct of all classes, and especially of the plebeian, early became predominant, and gradually overrode all patricians' views of family religion. When the straggling elements of society, the strangers, freedmen, and illegitimates multiplied in numbers and became wealthy, and

united into a class and were a society of their own, they became confident of their power, and demanded such democratic changes in the patrician religion and class laws and law procedures as would admit them to a social equality with the first families, and a full political equality in the administration of public affairs. The success of this demand changed all subsequent society. The influence of sacred faith almost, if not entirely, disappeared from civilization, and religion became what secular force sought to make it. During the entire period of the Roman Republic the popular instinct of right and equality was seeking to place civilization upon the eternal basis of essential right, of reason, and of human equality. Its success was only partial. When imperial Cæsar seized the life of the Republic it was the boast, though only a boast of Rome, that for nearly five hundred years, since the era of the Twelve Tables, all men had been equal before the law. This line of secular force, being something apart from religion, ended in Despotism.

This line meeting us, as we greet Cæsar and Christ, was one from which the highest results might have naturally been expected. For six hundred years philosophy had been a factor in Grecian and Roman development, and our hearts sink disappointed within us to see that even the philosophers pandered to power and betrayed the trust of civilization. Stoicism, for one hundred years, from Cicero to Seneca, participated in the growth of society, but did not save it. Society, in its merely secular grooves, ran rapidly down hill. Slavery, gladiatorial combats, innumerable divorces, disruption of all family life, show how public sentiment, customs, and laws degenerated, and what they became when separated from religious sanctions. The maximum of philosophy was the minimum of religion, and the minimum of religion was the maximum of immorality. The various cosmological theories as to whether everything came from the water, the air, or fire, were at most but entertaining speculations of those who had the leisure to think upon such matters; but when religious movements had so far died out in the confusion of speculative thought that men worshipped nothing, then came practical results. There was no moral bond on

man, for there was no moral authority above man. Time and human interests were all.*

The period of social decline during the time of the philosophers, and after the general decay of all religion, illustrates the fallacy of that as well as of this age, that mere "knowledge is power." The power man most needs comes from the moral side of his nature, not its intellectual. There is no connection between right and wrong and the multiplication table. Men never do right because they know the calculus. Opinion does not generally control action until it has warmth and moral energy. Conduct comes out of the emotions, rather than the mental persuasions. Again, I beg to say, that this dependence upon mere intellectual culture is what Herbert Spencer calls "the superstition of the age." It has become a proverb, that "men know the right, yet the wrong pursue." Every direction of society

* We shall be better able to see which would probably be the wisest civilizer when we consider the special characteristics of—

THE SCHOOLS.		THE CHURCH.
Epicureanism.	Stoicism.	Christianity.
Human Nature Phase.	Human Spirit Phase.	Divine Spirit Phase.
Expedient Morality.	Political Morality.	Social Morality.
Companionship.	Self.	Fraternity.
Self-indulgence.	Self-discipline.	Self-devotion.
Pleasure a Virtue.	Knowledge a Virtue.	Religious Love a Virtue.
Suffering Shunned.	Suffering Defied.	Suffering Sanctified.
Self-seeking.	Self-poised.	Self-sacrificed.
Recreation.	Reserve.	Religion.
Mistresses.	Concubines.	Wives.
A Pleased Man.	A Proud Man.	A Pious Man.
Death Ignored.	Death Despised.	Death Conquered.
Indifference.	Composure.	Hope.
Inclination.	Will.	Faith.
Humor.	Contempt.	Charity.
Politeness.	Courage.	Exultation.
Pleasure	Dignity.	Salvation.
Indolence.	War.	Good Works.
Weakness.	Rigidity.	Beneficence.
Smiles.	Frowns.	Cheerfulness.
Sentiments.	Thought.	Convictions.
Submission.	Resolution.	Reformation.
Catullus.	Cato.	Christ.
The Individual.	The Nation.	The World.
Respectability.	Honor.	Conscience.
Legal License.	Legal Rules.	Legal Principles.
Carelessness.	Apathy.	Sympathy.
Its one idea of good.	Its one idea of good.	All ideas of good.

not toward God is fatally wrong. True social progress is many-sided; but whatever else may be lacking, the experiment of modern civilization, judging the future by the past, will most certainly break down, if anything be lacking on its religious side. Men do not so much need mental light as moral power. Progress absorbs its strongest aliment, and receives its highest inspiration not from system of opinions, but from events and religion. Early Stoicism in Rome shows the insufficiency of mere intellectualism. Men can think one way and act another. Even Seneca, the Stoic philosopher, and Seneca, the sycophant of Nero, are two different men. So are Marcus Aurelius the Stoic, and Marcus Aurelius the Emperor. It would be too tedious to describe fully the fearful demoralization of Rome, saddest of all during the final days of philosophy. It was speculative wisdom without worship, and so failed to preserve society. Man needs moral feeling as well as moral thought. This line ended in both immorality and Despotism.

And now, standing at the cradle of the Roman Empire, let us look back to the founding of Rome, and around, and see what has been gained by seven hundred years of Patrician and Plebeian wars, bloodshed and suffering. The philosophers have come and spoken, and departed. The temples of the gods have been built and deserted, millions of patriots have laid down their lives for human freedom—the living son ceases to worship his dead father; the hymns to the Penates are silent; the sacred fire burns no longer upon the household altar; the satirist sneers at the devotee, and in the presence of the despotic Cæsar man stands without faith and without freedom. Gathering into himself all power, this great conqueror did not pretend to rest his dominion on the authority of the gods, like the sacerdotal kings; nor to represent the popular will, like the Tribunes, or even to be bound to regard the interests of his conquered millions. No sooner had the Roman people fully gained their freedom than they lost it, and had just that civilization, and that only, which the conqueror chose to dictate when he had wiped his sword upon the shroud of liberty. What a conclusion to these long lines of civilizing movements! Liberty with manacles on her hands, shackles on her feet, and the knife of the despotic butcher

at her throat ; the Philosophers a set of triflers ; the Priests a horde of imposters ; woman a degraded minion—this is but a sketch of a godless civilization bursting away from the ancient religions, poor as they were.

From this, the law of ancient civilization would seem to be, that the maximum of philosophy was the minimum of morality. Mental and moral wisdom without religious worship did not preserve civilization. The minimum of religion was the maximum of despotism. The lines of merely political government, minus religion, did not lead to liberty ; in a word, all the lines of Pagan faith, force and philosophy, as they led away from religious worship, led alike to slavery. As secular influences increase, the sacred decrease ; and with this decrease the best side of civilization broke down. As the popular religions faded, force and philosophy were left without a god, and culminated in the destruction of society. Whence was the remedy to come ? For society to progress, it needed to be based on the three great principles of liberty, equality and fraternity. Must it vainly struggle for these in the future as in the past ? Who could realize them to the world ? It was and has been possible only in one born in Judea. Rome could conquer the world, but did not hold its conquest. Civilization is in mental, moral and religious truth, especially the two latter, not in the sword.

The long history of Rome shows us better than we can otherwise see the irresistible working of this law of correlation of force. Taking our stand at Cæsar, and looking back through six centuries of political events, we see the law of correlation to be most perfectly proved. After all the struggles of Rome; of Kings with Patricians, of Consuls with Tribunes; after her wise Prætors and her imperishable laws, she sinks into loathsome immoralities, and holds out her hands for the manacles of Cæsar. Why was this ? The forces, like ballast in the foundering ship, had fatally shifted from the side of public purity and right, to the side of impurity and public wrong. The correlation was entire. The conservative force of its ancient religion, superstitious though it was, had decreased and faded out, and a thoroughly immoral and destructive force had just that much increased. The *quid pro quo* had been paid. One force had gone

and another had come. What is the explanation? Had political power decreased? On the contrary it had grown to full jurisdiction, not only over Rome, but also the world. Was it because of more moral darkness? Though philosophy, either moral or intellectual, was not known at Rome until 140 B.C., yet the civil law as it came from the Catos, the Scævolos and Sulspicius was a severe statement of moral duty. The secret of failure of Roman civilization was in this: Whatever advance moral thought had made, as seen in the adjudications of their Courts, in the culture of the few, it was almost entirely unknown to the many. The aphorism that "knowledge is power," must not be taken in an unlimited sense. Moral knowledge did not prove to be moral power. The masses of people cannot be philosophers, though they may be worshippers. Their ideas of law must be very general, and learned in a practical way. But however uncertain and indefinite their ideas of law might have been, they were much more so when, instead of the uncertainties of the Prætor-Law, they depended upon the uncertainties of the Imperial will. Despotism regards law as an arbitrary and human limitation; moral reason claims that law is essential rightness; religion urges as law the command of Omniscence.

II.—CHRISTIANITY RECONSTRUCTS CIVILIZATION.

Christ came, and all human things took a new departure. Enduring civilization is the mind of God in human affairs. The religious life was revived. God again was recognized in human governments.

While secular force increased and centralized in the Emperor, a mightier parallel was by its side. The old secular force and the new sacred faith went on together—the State and the Church—co-workers for man and God. We must remember that when the ancient State was added to the family, it did not supplant it or its laws, and when the Church was added to both, it supplemented what was good in each, and corrected, as far as it was permitted, what was incompatible with social advancement.

For the first three hundred years, from Christ to Constantine, the influence of Christianity was principally as a religion, and scarcely at all as a Church. It established itself, in its first

movements, by its theological creed, its moral maxims, its sacramental worship, and the devoted lives of its disciples. The ancestral worship of the patrician was exclusively for the family, the teachings of the ancient philosophers were for the learned few ; but the Christian religion carried its morality and its comforts of hope and worship down to the poor and obscure, and up to the distinguished and rich. It stopped not in cities, but it went out into the hedges and highways of the world ; it lingered not even in Asia, its home, but it went abroad into all the world, and preached its Gospel, its moral ideas, its essence of municipal law, to every creature. The time had come for a new, wider, more enduring force in civilization and law than that of any religion or philosophy ever before known ; a force that had man for its subject and the world for its forum and jurisdiction ; a force more organized and propagand than that of any previous intellectual or moral movement ; a conservative, remedial, aggressive, hopeful, universal regenerator. Such was Christianity. It brought Jewish law and civilization down to an age and people when these old legal and civil forces could join in the moral care of the whole world, which, in their former exclusiveness, they could not do, and it added natural reason and Divine revelation to the ancient family and political law of the Greeks and Romans. Solon had spoken for man in the counsels of mere human wisdom ; Moses and Christ now spoke for God. Mars Hill, Sinai and Calvary became the immovable thrones of eternal law. Christianity reunited religion, morality, philosophy and law, which Socrates, five hundred years before, had divorced, and made the law of human relations conservative by again making it Divine.

Thus Christianity, as a civilizer, spread itself everywhere as a new living force. Its morality had new motives, new development, and new application. It was no merely human theory of conduct, upon the low plane of human reason, confined to the schools of a select few, and barren of practical results ; but it had inherent power to realize and propagate itself, and claimed to be a revelation. All ages have had their moral schemes ; but none, like Christianity, was ever so self-helping, all-helping, simplified to common apprehension, and earnestly and universally

disseminated over the earth. Its maxims were for all classes and all nations, and it could, therefore, enter into the civilization of all ages. It united the highest moral feeling with the purest moral thought, and so blessed the world.

From this general discussion of principles represented, we deduce these conclusions: 1. That if sacred lines lead to bigotry, so all secular lines, whether before or after Christ, tend to despotism: which has been the worst—under which evil has society been the purest and happiest? 2. No religious error can resist secular force and philosophy, and no secular force should be encouraged to resist religious truth. 3. Superstition and myths originate in the traditions of the past or the fears of the present, and their movement is a correlative shrinkage from the belief of the many to that of the few. Christianity is claimed to be a revelation from God, and its movement, like that of all truth, has been a correlative increment from the belief of the few to that of the many. 4. The radiations of Christianity carry the lines of modern liberty, equality and fraternity across all secular lines, and modify them, while the lines of secular force cross all the lines of ancient religion and liberty and destroy them. 5. The maximum of despotism is the minimum of Christianity, and the maximum of Christianity is the minimum of despotism. The minimum of ancient religions, as seen at C, on the diagram, was the maximum of secular power and of mere philosophy, and the maximum of immorality. At the end, we see the maximum of Christian monotheism going on to the minimum of immorality and the minimum of despotism.

BRADLAUGH.—The editor of CHRISTIAN THOUGHT makes the following extract from a letter written him by a distinguished gentleman in England: "Mr. Bradlaugh had himself made a *mason* (the forms of induction didn't present the difficulties to him then, that they did when he wanted to take his seat as a legislator)! His next move was to ask the Prince of Wales, 'as a brother mason' to help his free thought undertaking. The Prince gave his letter to the Grand Master with a view to expelling such a man."

WHERE IS THE LAND OF GOSHEN?

[A Lecture delivered before the American Institute of Christian Philosophy, January 8th, 1885.]

By Mr. F. Cope Whitehouse, A.M.

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Then said Joseph unto his brethren, after he had made himself known unto them: "Haste ye, and go up to my father, and say unto him, Thus saith thy son Joseph, God hath made me lord of all Egypt: Come down unto me and tarry not, and thou shalt dwell in the land of Goshen, thou and thy children, and thy children's children and thy flocks and thy herds, and all that thou hast: and there will I nourish thee."—Gen., xlv., 9.

THERE is no agreement among modern writers as to the situation of the district thus promised by Joseph to his father and brethren and known to the Hebrew and Greek Jews as the land of Goshen or Gosen. In the "Old Testament Commentary for English Readers" Dr. Payne Smith says, "This land was situated on the eastern bank of the Nile, and, apparently commencing a little north of Memphis, extended to the Mediterranean and to the borders of the Philistines' land (Ex. xiii., 17). It probably was an unsettled district, but rich in pastures, and belonged in a very loose way to Egypt."* The cartographer has placed "the land of

LAKE MŒRIS RESTORED.

* In their present neglected condition, the coast of Egypt and the course of the Nile are very similar to their primitive state. *The eastern bank of the Nile* would (B.C. 1900) be on the Damietta branch (Abulfeda, lxii., p. 29), several hundred miles from *the borders of the Philistines' land.* Even the artificial mouth of the Pelusiac Canal was not less than four days' march from the arable land or seaports of Southern Palestine. The extension of Egypt to the east belongs to a later period.

Goshen" in the desert to the north of the Wadi Tumilat. A red line marks a fantastic route for the Exodus drawn without regard to the physical conditions of that part of the Arabian desert.* In the history of Egypt by Dr. Wiedemann, the western boundary of Goshen is the Sebennytic branch of the Nile, while the eastern frontier remains the desert.† As the Sebennytic mouth of the Nile lies to the west of the longitude of Memphis, this area includes more than half of the present Delta, and extends beyond the Suez Canal to the east. Canon Rawlinson so far coincides with these writers as to say that "the Israelites occupied a portion of the Tanitic Nome, lying between the Sebennytic and Pelusiac branches of the Nile, where they fed their own flocks and, at the same time, superintended the herds belonging to the Egyptian king."‡ He refers to the map of Dr. Brugsch, on which the Tanitic Nome is seventy-five miles to the east of the Sebennytic mouth, and is bounded on the north and east by the Nomos Sethroïtes and the Lake of Tennis-Menzaleh. There is no Pelusiac branch of the Nile, which has wholly disappeared. Dr. Brugsch supposed that Goshen embraced the district near Faqous (Phacoussa), but stretched out beyond the present Suez Canal into the vast solitude near Lake Serbonis, "where the least sign of life is an event."‖ Michælis had preceded him in putting Goshen "immediately contiguous to Palestine, but also southward as far as Heliopolis (Cairo), including those places on the east side of the Nile which from the Ethiopics of Heliodorus we know under the name of Bucolia (a marshy tract, overgrown with reeds and bushes, and only fit for pasture), and partly those deserts toward the east, in which the wandering hordes found some sustenance for their sheep, and which in some places may have extended to the Red Sea. Goshen may thus have extended

* Apparently from the map in *Durch Gosen zum Sinai*, Ebers. The long and very interesting note, Die Landschaft Gosen, pp. 488–507, scarcely justifies the title of the book. Dr. Ebers spent about six hours in examining from a railway carriage "Das zu Gosen gehörende (?) Wadi Tumilât und den (der) Suez Kanal," pp. 21–33, 1872. This valley extends from Ismailia to the Delta.

† Ægyptische Geschichte, p. 294, 1884.

‡ History of Egypt, ii., 246, 1881.

‖ History of Egypt, ii., 341.

pretty far into Eastern Africa."* The results of the examination of the Biblical evidence led Mr. R. S. Poole to the conclusion that the indications "decisively indicate the Wádi-t-Tumeylát (*sic*)."† Other identifications seem to him to be *utterly untenable*. But Dr. Lepsius recently argued at length against this view,‡ while Canon Rawlinson says that "the Wadi Toumilat (*sic*) offers but a thin thread of verdure along the line of the fresh water canal."‖ The land of Goshen, if in Lower Egypt, would appear to be only a general name for an irregular quadrilateral, bounded on the east by Palestine and the Red Sea, on the south from Suez to Cairo, on the west by the Sebennytic arm of the Nile, and on the north by the Mediterranean, in some part of which the children of Israel were settled. For these respective authors find in turn some fatal objection to each of the theories which would fix more definite limits. Nor is there any agreement as to any common point which might be considered as the chief town of the district (unless it be Heliopolis-Cairo), even if its frontiers could not be accurately determined.

It seems impossible to doubt, however, that there was some region well known to the Jews residing in Egypt after the return under Johanan, about B.C. 586 (1).§ When we remember how necessary it would be, after the seventy years of exile, to add, here and there, short notes to the Hebrew text to make the Mosaic narrative more intelligible to the people, nothing can be more natural than to suppose that such later additions were made by Ezra and Nehemiah.¶ The Hellenists, or Greek-speaking Jews

*The Bucolia are districts "quæ eleganter ut *sedem latronum* descripsit Heliodorus in Æthiopicis: fuit certe, estque adhuc (1776) latronum receptaculum in historia quoque ecclesiastica celebrium, quippe a quibus Marcum evangelistam occisum volunt Copti." (Michælis, on Abulfeda p. 121, n. 165). Here Prof. Palmer and Lieut. Gill were killed in 1882. Michælis also neither admitted nor denied that "Ainschemes (Cairo) tempore Josephi [1900] *et* Mosis [1500] regiam fuisse Pharaonum; optime certe convenit cum historia *adventus Jacobi* in Ægyptum et *exitus Israelitarum*, tridui iter a regia ad sinum Arabicum habentium, nec ullibi Nilum superantium." *Ib.*, note 276. Laws of Moses, English edition, i., 64, 1814.

† Smith's Dictionary of the Bible, s.v. Goshen.

‡ Zeitschrift, Æg. Sprache. II., 1883.

‖ Babylon and Egypt, p. 226, 1885 (p. 10).

§ The numbers refer to notes at the end of the article.

¶ Smith's Dictionary of the Bible, s.v. Pentateuch.

of Alexandria, were numerous, wealthy and intelligent. The Egypticity of the Pentateuch was essential to its credibility. It may be conceivable that they would not have altered the original Hebrew, after the canon had been fixed. They certainly would not hesitate to avail themselves of the opportunity afforded by the translation into the vernacular, to make the events conform to the physical characteristics of the country. Their explanatory notes, therefore, deserve the utmost consideration. If we concede that the LXX. had secured, by additional touches, a correct local coloring for the events of the Oppression, it is certain that the Coptic and Arabic versions would not deliberately interpose stumbling-blocks. Nor is it easy to see how changes of locality could be introduced by any of the three religious bodies, after the Mohammedan invasion had made a descendant of Abraham once more "lord of all Egypt." The Ishmaelite has ruled since A.D. 640 where the Israelite was Premier in the nineteenth century before the Christian Era. For twenty-five centuries previously the offspring of the bondwoman had preserved the traditions of their forefathers in the neighboring Arabia. Their records were strengthened by isolation, but corrected by frequent intercourse with the land which the Arabs now hold. They jealously guard to this day the mysterious cave which for far more than two thousand years has been supposed to be the burial place of Isaac and Jacob as well as Abraham. They identified places in Egypt as the localities of ancestral incident, and for at least twelve hundred years have held the well and prison of Joseph in an honor similar to the rock-hewn chamber under the Mosque of the most ancient city of Syria, Hebron-Macpelah.

In 1881, in the very words of Hassan ibn-Ismael, "I learned that the region of El-Fayoum and its neighborhood had been once governed by the Patriarch Joseph, according to a revelation made to him, and the commandment of the Most High; and that there once had been three hundred and sixty towns or villages in it charged to supply from their reserves food sufficient for a year of famine."* It was not, however, until subsequently that I satisfied myself by personal enquiry that this tradition was of extreme antiquity.

* Merveilles d'Egypte, Murtadi, p. 203.

The canal of Joseph,* the Bahr Jusuf, continues to prove by its name that there is in Egypt a prevalent belief that the son of Jacob created the Fayoum. This led me to conjecture that the Israelites migrated into Middle and not Lower Egypt, crossing the narrow desert from a point south of Suez, and that the Fayoum was the place in which Jacob awaited Joseph, confiding in the message sent to him in Canaan: "God hath made me lord of all Egypt; thou shalt dwell in the Land of Goshen." This opinion had already been held in modern times. Jablonski† in an exhaustive treatise had reached a conclusion which he stated in unqualified terms. "In Egypt, from all time, men have been of the opinion that the Israelites dwelt in the district of Heracleopolis [south of Cairo] (including especially the Arsinoïte Nome, the modern Fayoum), while, during the same period, their sovereigns lived in Memphis, added to its strength and beauty and made it the seat of government." If there were any other well-settled opinion, one would hesitate to disturb it. But, as

* In the Encyclopædia Britannica Mr. R. S. Poole has assigned this tradition to a comparatively recent date. "The Joseph whence it takes its name is the celebrated Saláh ed-Deen, the Saladin of our historians." (Egypt, § Bahr Yoosuf.) But in the "Fields of Gold," of Masūdi, reference is repeatedly made to this tradition as an accepted fact. "The Nile reaches Fostat (Cairo) after it has traversed the Said, and crossed the dyke of El-Lahoun into the Fayoum; this district which the river traverses is called 'the island of the habitation of Joseph;' we shall speak later in the history of Egypt of the districts and the monuments which this country owes to Joseph." (V. i., p. 209, Paris.) He fulfils his intention in Chap. xxi., giving "the history of the Fayoum, a district in the Said, its canals on the higher plateau, and in what the natives call the *metati* or the *metati-oul-metati*, that is to say, the depressed region and the works undertaken by Joseph to fertilize the country, encircled on all sides by water as an island." Saladin built the citadel of Cairo in 1166, and Masūdi was born at Bagdad in 885, and died in Cairo in 956. The construction of Lake Mœris, with its attendant redemption of the Delta, control over the independent barons, imposition of a water-tax and changes in social and political life ascribed in the Jewish and Mohammedan records to Joseph, is assigned by the Greek historians to King Mœris. Mœris, or Meri, is a mere personification of the word "Sea," *i.e.*, *Mar*, Egyptian; *Ma*, Hebrew and Arabic; *Mare*, Latin; *Mer*, French, and *Mere*, English. Joseph is mentioned under the Greek form Souphis, in connection with the building of the Pyramids. There were structures near Gizeh, on the continuation of this Canal of Joseph, which were very anciently regarded as built under his administration. One of them seems to have been the granite and alabaster edifice known as the Temple of the Sphinx. This branch of the Nile commences near Siut and empties into the Birket el-Qerūn.

† De Terra Gosen, Dis. vi., § 8, and see note (2).

we have seen, there is none. The eye ranges far beyond the land of Egypt, over which Joseph was lord, from El-Arisch along the Mediterranean more than half way across the Delta, and if the Fresh-water canal seems to traverse a district suitable for a people separated from Egypt, Dr. Lepsius denies that it existed, and Canon Rawlinson shows that it was at all times entirely inadequate to the wants of a large population.

The indications enumerated by Mr. R. S. Poole as indispensable conditions imposed by the Sacred writers are the following:

1. Goshen was near the usual residence of Joseph's Pharaoh.

2. It was between Joseph's residence at the time and the frontier of Palestine, and apparently the extreme province towards that frontier.*

3. The advice that Joseph gave his brethren further characterizes the territory—"When Pharaoh shall call you, and shall say, What is your occupation? Then ye shall say, Thy servants have been herdsmen of cattle from our youth even until now, both we and also our fathers; that ye may dwell in the land of Goshen; for every shepherd is an abomination unto the Egyptians." It is remarkable that in Coptic *Shos* signifies both "a shepherd" and "disgrace." This passage shows that Goshen was scarcely regarded as a part of Egypt proper, and was not peopled by Egyptians. But it is not to be inferred that Goshen had no Egyptian [qy. other] inhabitants at this period: at the time of the ten plagues such are distinctly mentioned. That there was a foreign population seems evident from the account of the calamity of Ephraim's house.

4. "And Pharaoh spake unto Joseph, saying, Thy father and thy brethren are come unto thee: the land of Egypt is before thee; in the best of the land make thy father and brethren to dwell: in the land of Goshen let them dwell: and if thou knowest any men of activity among them, then make them rulers over my cattle. And Joseph placed his father and his brethren, and gave them a possession in the land of Egypt, in the best of the land, in the land of Rameses, as Pharaoh had commanded." (Genesis xlvii., 5.) Goshen was thus a

* But see Gen. xlvi., 6, and 28, 29. Jacob was in the land of Egypt and yet at some distance from the palace of Pharaoh when Judah was sent to Joseph.

pastoral country where some of Pharaoh's cattle were kept. The expression "in the best of the land" must be the best of the land for a pastoral people.

5. The sufficiency of this tract for the Israelites; their prosperity there, and their virtual separation from the great body of the [native] Egyptians must also be borne in mind.

From these indications (and the route of the Exodus) Mr. Poole inferred that "the land of Goshen must have in part been near the eastern side of the ancient Delta, about thirty miles in a direct course from the ancient western shore of the Arabian Gulf." He thought that "the tradition of Goshen and its inhabitants must have become very faint at the time when the Pentateuch was translated," and said that "we have no warrant for attributing to the translator or translators any more than a general and popular knowledge of Egyptian matters." Had he adhered to this opinion and frankly conceded that what had been hidden from David and Solomon, from Jeremiah and Ezra, from Philo-Judæus and the Seventy, from Athanasius and Cyril, in short, from all the Jewish, Greek, Coptic, Latin and Arabic students of the Mosaic record and traditions for nearly thirty centuries, from the foundation of the kingdom of Judah to the last lecture on the Koran in the great University of Cairo, must remain forever unknown, sufficient excuse for his caution would have been found in the vagueness or disagreement of such learned writers as Drs. Payne Smith, Wiedemann, Lepsius, Brugsch, and Rawlinson. Mr. Poole, however, seems to assert that the Hebrew text *decisively indicates* the narrow strip of arable land irrigated by the fresh water canal, conspicuous on every map of Egypt, ancient or modern, illuminated in purple and gold on the vellum copies of Claudius Ptolemy (almost a contemporary of Clement of Alexandria), and sharply contrasted with the solitudes of the surrounding desert on the latest map of the British War Office. One feels surprise that a man of eminence, to whose pen a very large number of articles on Biblical geography are due, who enjoys a high position as the just reward of his patient industry, who has never laid claim to any originality of research, but contented himself with profiting by his unrivalled facilities in the British Museum for consulting not only books but living

scholars, and who has always sided against rationalism, should have pronounced a sentence of culpable blindness against the entire world from the court of Ahasuerus at Babylon to the chair of History in the University of Oxford. But this theory is universally rejected. There is not the smallest doubt expressed by any Bible-geographer, that at the time that Joseph sent the message to his father, offering him the land of Goshen, the Wadi Tumilat was an undistinguishable part of a waste of broken limestone intermingled with sand, on which for hundreds of square miles there would not have been pasturage for a single goat. If Joseph used the words "land of Goshen" of the "canal of Rameses," the narrative is not authentic, and a fatal blow is dealt at the truth of the Pentateuch (3).

Dr. Ebers, in his elaborate examination of the situation of Goshen, commences by stating his conviction that the authors of the narrative were well acquainted with Egyptian matters, and "treat the story with full knowledge of the places which are supposed to have been the scene of its events."* A conclusive proof of this is furnished by the different names used in the Hebrew, Septuagint, Coptic and Arabic versions, in the Targums of Onkelos and Jerusalem, and by individual writers, as Josephus, Jerome, Jonathan, Benjamin of Tudela, Edrisi and Abulfeda. The same names might have been slightly modified with the change of language. Entirely different groups of sound would not have been substituted unless the places were so well known that each author was compelled to use the appellation with which his readers were best acquainted. No sooner, however, has Dr. Ebers made this general admission than he proceeds to contradict himself by saying: "The LXX. give the name of the city where Jacob is said to have met Joseph, but the addition to the text of 'Heroon-Polis in the Land of Ramessè,' does not seem to us to be felicitous, because Heroonpolis lay so far to the south" (*ibid*, p. 491). But it seemed so very probable to the commander-in-chief of the Jewish forces in Palestine in the Christian

* "Wir bemerken ausdrücklich dass wir die Person des Jakob der Legende zuweisen, deren Verzeichner indessen mit den Ægyptischen Verhältnissen wohl vertraut waren und die heilige Sage ihres Volks mit voller Kenntniss der Localitäten, welche ihre Schauplatz gewesen sein sollten, behandeln." Ebers, durch Gosen zum Sinai, p. 490, 1872.

Era, two hundred years later, that Josephus never uses the name Goshen at all, and substitutes Heroonpolis for the alien and primitive appellation which the Hebrew regarded as sufficient, but which the Alexandrian Jews explained by the Greek name then recently adopted. We believe, said Ebers, with Schleiden, that this gloss of the LXX. can only be understood if we suppose that Joseph crossed from Suez to Memphis, by the route now known as the Derb el-Hagg, or Pilgrim-route; but adds, "The LXX. changed the original for the worse." He continues: "The Coptic, which only in extremely rare cases ventures to differ from the LXX., has taken *the liberty* to put for Heroonpolis, Pithom." The Copts, or native Egyptian Christians, whose wrists have been signed with the sign of the Cross and their Scriptures preserved in Egypt ever since their forefathers translated them at Heliopolis, where Moses lived and the Virgin Mary rested, not only substitute for the Hebrew Goshen, and the Greek Heroon-Polis, Pithom, but identify it with Etham "on the edge of the desert" (Exodus xiii., 20) as well as the "store-city" of the Oppression (Ex. i., 11). The conclusion, therefore, at which Dr. Ebers arrives rejects the evidence of the Alexandrian Hellenists as well as the Memphite Copts. He might have added the Arabic-speaking Jews. For es-Saadia translates the Pithom of Exodus by el-Fayoum and Goshen by el-Sidr (4). The land of Ramessē in the LXX. is an explanatory addition, because no Ramses had yet reigned. Its natural meaning, however, limits it to the district lying south of the neck of the Delta. The names On, Heliopolis, or Rameses were translations of the same ideograph. The Coptic version puts it in so many words when enumerating the works of the Israelites at "Pithom and Ramses and On, the City of the Sun." Dr. Ebers concedes that the Hebrews at one time, in considerable numbers, occupied a part of Cairo. "Heliopolis must be considered as a place in the land of Goshen" (*ibid*, p. 496).

Twenty-five miles south of Old Cairo is a town called Tahmeh*, connected by a single day's journey (seventeen miles), through a level and frequented desert route, with Tahmieh, an important town in the oasis of the Fayoum. Eight miles

* The District of the Fayoum included Tahmeh, see de Sacy on Abulfeda; see also p. 363.

farther south an easy road to the Red Sea is joined after a few miles by another highway which leaves Atfieh (Aphroditopolis), eight miles higher up the Nile. Here the distance into the Fayoum from the cultivated valley was reduced in earlier days to less than five miles. This region of the Fayoum was known to the Greek and Roman writers as the Arsinoïte Nome. "Besides corn and the usual cereals and vegetables of the Nile valley, it abounded in dates, figs, roses, and its vineyards and gardens rivalled those in the vicinity of Alexandria. Here, too, alone the olive repaid cultivation." It was protected on the west by the immense circuit of Mœris—the greatest wonder of the Egyptian world—not only from the incursions of Greek pirates and the nomads of the oases, but from the hot winds of the desert. On the east two canals encircled it, and the dam which excluded the floods of the Nile shut out also the plagues of putrid water, frogs, lice and flies, which make the period of low Nile so inimical to comfort and deleterious to health through the entire valley and Delta. The cattle of Egypt annually suffer from insufficient food, crowded into the scant spots which remain above the waste of waters when the river rises. The pasturages of the Fayoum never fail. The Sheikh Sirdaui and the thousands of Bedouins who range over its borders and acknowledge his sway are not compelled to drive each year their flocks and herds by tortuous routes to distant oases, from Kirgeh to Siwah. Its capital, Arsinoe, had two ports on the Red Sea called by its name. "The shortness of the road across the eastern desert and its position near the canal were the principal advantages of Arsinoe (by the sea) as a staple of trade." Another Arsinoe was at the southern entrance of the Heroopolite Gulf.* It is this region of the Fayoum, to which, according to Jablonski, Jacob came with his flocks and his herds by the route which the Arabic geographers have unanimously selected for both his advent and for the Exodus of his descendants. Here he awaited Joseph while Judah went to Memphis. To this Pithom, or Heroonpolis, Joseph drove southward in his chariot, and brought his father to the capital.† But

* Smith's Dict., s.v. Arsinoe.

† The Hebrew text and the Versions use the distinctive terms for ascending or descending the Nile Valley.

Jacob, after Pharaoh had given him the freedom of all Egypt, does not seem to have returned to the more distant point. There were royal pasturages also near Heliopolis under the shadow of the structures which the Pilgrim Antoninus said were the granaries of Joseph, where Josephus says that "the king's shepherds had their pasturage." His testimony is confirmed not only by the ancient Egyptian records, but by Herodotus, who speaks of the shepherd Philition, who pastured his flocks at Gizeh.*

Against this view, there are but four objections. The first is based upon the assumption that Goshen must have been near Palestine. Mere contiguity, as the crow flies, would not be sufficient. Alexander and Titus carried their armies by forced marches across the desert from Rhinocolura†, but the flocks and herds of the patriarch moved slowly from Beersheba past Clysma, at the head of the Gulf of Suez, to the point nearest to Heroonpolis Magna and the royal pasturages in the Fayoum Goshen. Secondly, it has been thought that the qualification of Goshen as Arabian by the LXX. required us to place it on the eastern side of the Nile, in the Arabian Nome. This Nome probably included Old Cairo, but its other boundaries are very uncertain. In the treatise of Josephus against Apion he uses the arguments of Manetho to show that the Fayoum, or great entrenched camp at the foot of the Bahr Jusuf, which still retains the name of Howara, was occupied in part by the Jews together with that "mixed multitude which went up also with them."‡ Now, "some say that the Hyksos are Arabians" (Josephus), and the Hebrew text called them *Ereb Rab.* The Fayoum was never considered part of Egypt Proper, even in the late period of the Ptolemies. A third objection has been found in the "land of Zoan" and the assumed identification of San el-Hagar through the Tanis of the LXX. with Zoan the capital of Upper and Lower Egypt. There is no trace in history of an imperial dynasty which ruled at San el-Hagar.‖ The chief towns of Middle and Upper

* Herodotus, vii., § 128.
† Arrian. Josephus.
‡ See Proc. of Soc. of Biblical Archæology, London, 1885.
‖ See Proc. Am. Or. Soc., Balt., Oct., 1884.

Egypt had smaller places dependent upon them, bearing the same name. Thus while Heracleopolis Magna lay far into the land of Rameses-Mizraim, Heracleopolis Parva was to the west of San el-Hagar.* A stately array of temples, palaces, fortresses, and suburbs filled the narrow strait where the Nile issues into the Delta. It has had not only as many names as there are languages in the commercial world, with varied spelling, as Londinum, Londra and London, or Paris and Parigi, but a score of diverse appellations. Raamses, or Rameses or Ramessu, is also Pelusin, Babylon, Kahira, Misr, Fostat, Memphis, Noph, Heliopolis, el-Arisch, On, 'An, Aian, Ian, Ta-An, Zoan and Tanis Magna. The obstacle presented by the Nile may be enumerated as a fourth objection. It is in reality an argument in favor of an Exodus which started with the Aperui or Hebrews at Heliopolis on the desert side of the Nile, reinforced by their fellow-countrymen in the quarries of Turra as well as those who joined them from the Fayoum.† The Nile was bridged at many points. The difficulty of crossing the small canals in the Delta may therefore be urged as showing that no route was practicable which did not give opportunity to those who were on the left bank of any branch of the river to use some of the places at which a passage was commonly effected. It would be readily accomplished near Memphis, once and for all, with the facilities afforded by a single stream which ran for sixty miles through the populous district of the Heracleopolite and Memphite Nomes.

This is the dilemma. Either, as Mr. R. S. Poole seemed inclined to say, there was no district known to the Judæo-Christian world as Goshen-Pithom-Heroonpolis, with a city near it called Raamses-Heliopolis-Pelusin-Zoan-Tanis, in which case we have no region for the sojourn of four hundred years, and no scene for the miracles wrought by Moses; or, the favored country, lying opposite to the town called to this day Beni-Suef, with a short route communicating with the Red Sea, redeemed and occupied by Arabians who were hated by the native Egyptians, connected with the Nile valley to the north

* See "Raamses-Heliopolis and Zoan-Cairo," *The Churchman*, May 3d, 1884; and "Where is Zoan?" *The Observer*, June 19th, 1884.

† Josephus *contra* Apion, i., 16.

by a route whose termini are still called Tahmieh-Tahmeh, known to the Egyptians (heathens or Christians) as Pi-Tum (the West) in which were granaries said to have been constructed by the Israelites similar to those which were at Gizeh and Heliopolis, is the part of Mizraim-Rameses-Egypt, which was the land of Goshen of the Mosaic narrative.

Modern scholarship has evidently reached no result which can be accepted with confidence by a common-sense critic. "Goshen appears to have lain between the eastern Delta of the Nile and the frontier of Palestine. Rameses, the principal city of the land, was the starting-point of the Exodus of the chosen people, who reached the Red Sea in three days. From this and other circumstances, it has been concluded that the Wádi-t-Tumeylát (the valley through which formerly passed the canal of the Red Sea), at the western extremity of which Rameses was situated, is probably the Goshen of the Old Testament."* But Rameses-Heliopolis, at the western extremity of the canal of Rameses, was under the citadel of Babylon-Letopolis, where, according to Josephus and the ancient Egyptian records, the Hebrews were at work in the quarries of Turra, as well as on the great canal itself.

I deny, with Dr. Ebers, that the student is forced to admit that the land of Goshen was outlined in such vague terms, that it only cast, as a floating cloud, a shadow across the blank expanse of ancient Egypt and the Syrian desert. Even then, *cæteris paribus*, why not choose the best possible situation, endowed with the greatest natural advantages, and encompassed by the largest number of witnesses? Who would hesitate, if such were the alternative, to substitute in the glad message of Joseph, eager to show filial reverence to his father and prove by his temporal power the measure and the cause of his forgiveness to his brethren, the fair and healthful pasturages of the Arsinoite Nome for the frightful and distant solitudes of the Serbonian Bog, then as now wholly beyond the confines of Egypt. The slender ribbon of cultivated land which lay on either side of the frontier road through the Wadi Tumilat, guarded by its garrison towns, was exposed to hostile invasion, densely popu-

* American Encyclopædia, article, Goshen.

lated by the soldiers and the laborers ceaselessly employed upon its canal, and bounded to the north and south by trackless deserts which rise above Suez into commanding precipices of thousands of feet in height. The best of the land was not in the heart of the Delta, either under water from June to December, wrested from the native tillers of the soil and bestowed on alien shepherds, or the fetid and pestilential marshes near San el-Hagar, rejected as unfit for human habitation and subject to the constant inroads of the pirates of the Mediterranean. There is no such alternative, because the land of Goshen—the Goshen of Arabia, the Heroonpolite Nome, the Pithom of the native Christians—was the well-watered West which has been the fairest part of Egypt since the Hyksos gained over nature and the Egyptians the peaceful conquest due to their superior ability.* What new and deep meaning, then, attaches to the blessing of Jacob! "Joseph is, *as the canal which bears his name*, a fruitful branch *of the Nile*, even a fruitful branch by *a lake*, whose branches run over the wall *of the Libyan Desert*. The archers, *even as the hot arrows of the sun*, have sorely grieved him, and shot at him, and hated him. But his bow, *curving in the vast sweep of its waters*, abode in strength, and the arms of his hands were made strong by the hands of the mighty God of Jacob (from thence is the shepherd, the stone of Israel).† Even by the God of thy father, who shall help thee; and by the Almighty who shall bless thee with blessings of heaven above, blessings of the deep *sea* that lieth under, blessings of the breast and of the womb. The blessings of thy father have prevailed above the blessings of my progenitors into the utmost *western* bound of the everlasting hills *of the desert:* they shall be on the head of Joseph and on the crown of him that was separate from his brethren."

* Josephus *contra* Apion, i., 14.

† The local allusions in Genesis, xlix., are discussed at length under the title, "The Blessing of Jacob," in my work on Lake Mœris, now in preparation. See also v., viii., x., of the Index (only) printed June, 1881.

NOTE.—(1) After "Nebuzar-adan carried away captive into Babylon the remnant of the people that remained in the city," he "left of the poor of the people, which had nothing, in the land of Judah and gave them vineyards and fields at the same time." (Jeremiah xxxix., 9, 10.) He released Jeremiah (xxxix., 14), who had been im-

prisoned for advising a surrender (xxxviii., 2, 6, 28), and endeavored by the support of this prophet to reëstablish a settled government in Judæa. But Azariah and Johanan refused to submit, and "obeyed not the voice of the Lord to dwell in the land of Judah" (xliii., 4), and "all the remnant of Judah, men, women and children, and the king's daughters, and every person that Nebuzar-adan had left [as hostages] with Gedaliah, and with Jeremiah and Baruch [as prisoners] came into the land of Egypt; even to Tahpanhes." (*Ib.*, 6, 7.) This return of the Jews after an absence of a thousand years to the country where they had enjoyed four centuries (B.C. 1900–1500) of unexampled prosperity, their speedy rise to wealth and influence, the comparatively modern decay and present rapid recovery of Israelitish property and power in the Valley of the Nile, with its possible repetition of history and return to Syria, will be found discussed at length from original researches, surveys and photographs under the title Tahpanhes in "Lake Mœris."

(2) Jablonski, Paul Ernest (1693–1767), Professor of Theology in the University of Frankfort, and member of the Royal Academy of Berlin, author of the celebrated "Pantheon Ægyptiorum" (1752), and of the posthumous *Opuscula* (Leyden, 1804–10, 3 vols). His reputation is a sufficient answer to the anonymous articles evoked by the efforts which I have made to secure a more considerate treatment of Egyptian traditions. The archæological wealth of the Fayoum transcends the widest bounds of the imagination. The successive discoveries of hundreds of papyri of the Greco-Roman period excite a reasonable expectation that Hebrew texts may yet be found of the period of Baruch and Jeremiah, preserved in the desert which encircles the present contracted area of the cultivated land. There were ruins of "Pharaoh's granaries" and a remnant of the immigrants under Johanan in this Pithom when R. Benjamin visited it only six centuries ago.

(3) The Egypt Exploration Fund.—Mr. R. S. Poole had expressed a hope in his Cities of Egypt (A.D. 1882), that an effort would be made to explore the parts of Egypt which he identified with Scriptural sites. Miss Amelia B. Edwards had attracted attention and commanded sympathetic appreciation by her excellent work on the Nile (1877). The Egypt Exploration Fund was organized chiefly at the expense of the late Dr. Wilson. M. Naville was engaged to proceed to Egypt in 1883. The convenience of a land of Goshen in the valley of the fresh-water canal obtained an indulgence for its supporters, wholly unwarranted by the Biblical conditions and barren of any historical evidence. At the west end of the valley, Sir G. Wilkinson, Dr. Lepsius and others placed Pithom, not far from Belbis and Bubastis. At the east end lay what was known as Ramses-Maschuta of the Wadi Tumilat. It was so termed on account of a statue of Ramses II. enthroned between the gods Tum and Ra. The valley, therefore, was called Tum, and the railway station Ramses. Fragments of mud bricks were carried away as relics by those guests of M. de Lesseps, who, in the absence of any possible evidence worthy of the name, hoped rather than thought that "they were part of the enclosure of the ancient Raamses, and a striking proof of the truth of the narrative of the Oppression." (Ebers, Zum Sinai durch Gosen, pp. 496–502.) Excavations under M. Naville on this spot were fruitless. A memoir on Pithom has long been promised, and is even said to be in type, but has not yet (January 16th, 1885) been published. An inscription is said to have been found by the Arabs or by the contractor employed, but it is either a forgery or transported from some other

point, as is conclusively shown by the Antonine Itinerary. This society had a *succès d'estime*. Critical scholars, however, deeply regretted the unscientific character of all its operations. While silent in public from respect for Messrs. Naville and Poole and Miss A. B. Edwards, they have regarded with profound grief the attempt to substitute for a *consensus* of Scripture, history and tradition, an impossible Goshen and an equally impossible Exodus route. The Lord who went before the children of Israel has never taken away the pillar of cloud in the daylight of later history and the physical conditions of Egypt; nor the pillar of fire—of the Holy Ghost—by the night much observed in all generations and not wholly without record in Egyptian annals. These English explorers are "entangled in the land; the wilderness has shut them in." It is their own act. No miracle will save them. They have also with them "a mixed multitude." How will they return them to safety? They have done much mischief, and some of it is irreparable. In Germany and America prompt and continuous protest has been made against their methods, but the only mode of securing condonation from those whose money has been wasted lies in a speedy acknowledgment of their sad temerity and overweening self-confidence. This society also excavated at San el-Hagar (1884). Here the prudence and skill of Mr. Flinders Petrie averted similar deplorable results. The ground had been repeatedly examined by French, German and Khedival expeditions, so that the archæological results were unimportant. Nothing whatever was found of the slightest exegetical value. But, "they builded better than they knew." If Zoan is Memphis, and San el-Hagar only Tanis Parva, the negative result is an important confirmation of the correct local coloring of the Mosaic narrative. The work has been indefinitely suspended. Mr. Petrie is digging for Ptolemaic pottery towards Alexandria, while M. Naville is engaged in the region of Belbis, where there is strong antecedent probability that something may be obtained.

(4) Saadia ben-Joseph, al-Fajumi, celebrated as an exegetical scholar, theologian and Talmudist, born in the Fayoum, A.D. 892, became, in A.D. 928, the Rector of the Jewish Academy at Sora, near Bagdad, at that time the chief seat of Rabbinism. He explained in his Arabic version of the Pentateuch the Egyptian geographical names. He substitutes el-Fayoum for Pithom, and 'Ain-Shems for Rameses. He adds to the Hebrew description of the land of Rameses as the best of the land of Egypt: "and that is the land of 'Ain Shems." There is not the least doubt that 'Ain Shems or Rameses was the Heliopolis-On of the LXX. (B.C. 285), and of Josephus (A.D. 50), and the City of the Sun of the Coptic version (A.D. 250), near Memphis-Babylon-Cairo. The Talmudists, therefore, of the Nile and the Tigris were here in accord with the Hellenists of Alexandria and that Greek version, whose prophetic books the Rabbis had nevertheless condemned. The Targums of Jonathan and Jerusalem, however, follow neither the Hebrew, Greek nor Arabic. They substitute in Gen. xlvii., 11, Ardya Pelusin for the *land* of Rameses, but in Ex. i., 11, translate the *city* Rameses by Tanin and Pelusin respectively. Evidently, again, we have here the substitution of equivalent geographical appellations, not a change in place. This is fully explained by the Pilgrimage of Antoninus (ca. A.D. 500). He came from Sinai to Suez, and going south beyond Clysma, crossed the desert to the Nile, saw the Nilometer at Rhoda and then visited near Cairo "two cities which the daughters of Lot are said to have built. One of them is named Babylonia." The tradition arose from the derivation Pa-Luth-In, the supposed dual form of Luth, with the article *pa*. He continues:

"Then we came through the *plains of Tanis* to the city of Memphis, and to Anti-Noe where Pharaoh lived, from which cities the children of Israel went out." He further fixed the spot by adding: "At these places [near the Pyramids—see map of Fra-Mauro] are the granaries of Joseph, twelve in number, full of wheat. At Memphis was a temple which is now a church" (chaps. xliii., xliv.). Tanis is a nominative formed from Tanin. The Talmudist followed the Tannen of the papyri. Leo Africanus (A.D. 1560) shows the later state of African opinion: "Plurimi nostra tempestate viri præcellentes, tam Christiani quam Judæi et Mohametani sua opinione falluntur. Mesre (Masr-Cairo) enim putant eo loco situm, in quo Mosis et Josephi Pharaones habitarunt; quod Pharaonis oppidum ea in Africæ parte existiment, qua Nilus ad Occidentem in Africam flectitur, ubi quoque visuntur Pyramides; quod et sacra scriptura innuere videtur in libro Geneseos, ubi Judæos fabricationi Apthun oppidi a Pharaone conditi occupatos Mosis tempore fuisse meminit: ea nempe Africæ parte qua Nilus in Africam cursum flectit, ab Alcairo in meridiem circiter L. passuum millibus ad Nili alveum, quem in Occidentem vergere supra diximus. Aliud quoque proferunt indicium, Pharaonis oppidum eo loco fuisse constructum, quod ad confluentiam Nili alveorum structura antiquissima sit, quæ Josephi sepulchrum nominatur, in quo repositus fuerit Joseph priusquam ab Hebræis ad Patrum sepulturam transferretur. *Denique* nec Alcairum, nec vicina loca habent quod se Pharaonis regionem inhabitare contendant: hoc tamen loco sciendum est, nobilitatem priscorum Ægyptiorum, olim *in Sahidica regione* (*cf.* Sadeh Zoan), supra Alcairum constitisse, in oppidis Fium, Mansichmin, atque id genus cæteris celebrioribus." (Lib. viii., ii., p. 182, Ed. Gesner, 1830.) When the R. Benjamin of Tudela said in A.D. 1173, "The Fayoum, this is Pithom; it contains about twenty Jews and has some remains of the buildings erected by our forefathers even to this day. Four days from thence brings us to Mizraim [or Memphis], commonly called Old Cairo. The Rabbi Nathaniel is the President of the Jewish University, and is one of the officers of the great king who resides in the fortress of Zoan [*i. e.*, Tanis-Babylon]; the granaries of Joseph are seen near the Pyramids;" he repeats the same traditions as Antoninus and es-Saadia. "Half a day to 'Ain al-Shems, the ancient Ramses, which is in ruins. Here (too) are remains of the buildings erected by our forefathers and tower-like buildings constructed of bricks." But he also said: "From Old Mizraim (Cairo) to the land of Goshen is eight parasangs," or thirty miles. He puts Belbīs as its chief city, containing in the twelfth century three thousand Jews. The Mohammedan tradition was to the same effect. "Balbīs is called in the Law of Moses, Jāshān, and is the place to which Jacob *went down after* he had presented himself to his son Joseph. So he went down to the Land of Jāshān, which is Balbīs, to the pasturage on account of their cattle." Manetho solves any doubt that might arise by showing that the Hyk-Sos kings had two fortified enclosures, besides their citadel at Memphis. They were called by the same name—Avaris, derived from the chief seat of their power at the foot of the Bahr Jūsuf. Hence arose the confusion, sometimes imaginary and sometimes real. The Targum of Palestine represents the instruction given to St. Paul at the feet of Gamaliel. "The borders of the land of Mizraim extended four hundred pharsee, but the land of Goshen, where Mosheh and the sons of Israel were, was in the midst of the land of Mizraim: and the royal palace of Pharaoh was at the entrance of the land of Mizraim." (The Targums on the Pentateuch, Etheridge, i. 477.) Fayoum-Pithom-Goshen was seventy miles up the Valley of the Nile. Zoan-Tanis-Memphis was at the entrance of the Delta.

THE HITTITES.

A STUDY IN BIBLICAL GEOGRAPHY AND ANTIQUITIES.

[A Paper read at the Monthly Meeting of the American Institute of Philosophy, February 5th, 1884.]*

By Rev. James F. Riggs, A.M., Bergen Point, N. J.

ATTENTION has been drawn of late to the remains of Hittite sculpture and wall-building in various parts of Asia Minor and the northern section of Syria. Efforts have also been made to put together intelligently the fragmentary information which we possess, and so to frame something like a general view of this curious people who have almost eluded the search of the archæologist. The facts, so far as known, have been presented in various published documents and particularly in the very interesting book of Dr. William Wright.

Many curious problems are suggested by the limited range of facts thus far brought to light, and we cannot doubt that more substantial information will soon be forthcoming.

We shall get rid of some serious difficulties in the prosecution of this inquiry if we set aside entirely the word "empire," used by some as a descriptive term in reference to the Hittite people. It is an objectionable term as used, because it misleads the student. There never was any such thing as a Hittite empire in the sense that the term suggests, that is, like the Empire of Nebuchadnezzar, or of Cyrus the Great. Or even in the qualified sense, there enters into the foundation-idea of imperialism a notion of authority recognized in time of peace, and of a central, tax-collecting and executive government, holding all subordinate functionaries in a true submission and fealty. Imperialism is simply the culmination of the judicial system—it is

* Professor Francis Brown, of the Union Theological Seminary, delivered a very interesting and instructive address on the Hittites at this meeting. He has not been able to furnish his lecture for the press, but Mr. Riggs, who followed Prof. Brown, has kindly given us the substance of his paper in this article.—Ed.

the end of a series of appellate courts. Mere power does not make a man an emperor. A bandit might wield vast power, and yet the term be wholly inapplicable to him. Is it not much more probable that the national structure of the Hittites was tribal?

The modern Arabs will be found to present a close parallel in some particulars. Reference will be made presently to this line of comparison (Hittites and Arabs), but the point should be emphasized at the outset that there is a great difference between power and empire—between a people and a state. We may admit the power and yet deny the empire; we may recognize fully the importance of the Hittite people and yet assign a very low degree of importance to any state bearing that name. In a like manner we should deprecate the assumption of any single date for all these various remains scattered over Asia Minor and Syria. Hundreds of years may have intervened between one bit of carving and another, yet both be of a genuine Hittite character. Widespread diffusion in the geographical sense may be quite in keeping with a wide scattering of these monuments in the temporal sense. They are hundreds of miles apart: may they not be also hundreds of years apart? And if so, the force of the argument for a continuous and self-centred Hittite state is seriously affected.

Some points, however, are quite clear on the other side—showing that the Hittites were formidable on the field of battle; that they were a constant foe to the Egyptians, the Hebrews and the Empire of Assyria. Of the importance of the subject as a grave historical inquiry there can be no doubt. Of the long duration of their influence there can be no doubt. And it is plain that they constitute a noteworthy feature in *every faithful picture of Hebrew life and experience*, from the times of Abraham down to the days of Amos. Heth himself is mentioned in Genesis x., 15, and about seven hundred years after Moses' death the prophet Amos wrote the words, "Pass ye unto Calneh and see, and from thence go ye to Hamath the great; then go down to Gath of the Philistines; be they better than these kingdoms?" (Amos vi., 2.)

This city of Hamath (*sig.*, fortress) is a place of no small

interest in questions of biblical geography and history. It is referred to by several of the inspired writers, although outside the limits of the Holy Land proper. Quite recently it has renewed its claims on the attention of scholars, in consequence of the series of accidents by which it became the focus of interest in the Hittite investigation. Hamath was one of the two most noteworthy foci of the Hittite population in ancient times. It has been identified with the children of Heth from the beginning, and the name as pronounced by the modern Syrians is but slightly different from the old designation. The final letter in the Hebrew spelling, Teth, is softened into the lightest of the aspirates, and the "Hamath" of Scripture becomes the "Hamah" of modern travel.

After the mention of Heth, in Genesis x., 15, we find in the eighteenth verse of the same chapter the following remark: "And the Arvadite, and the Zemarite, and the *Hamathite:* and afterward were the families of the Canaanites spread abroad."

The spot where this city is located has always been of considerable strategic importance in Syria, because it commands the passage of a remarkable valley, a valley that has four arms or branches. The long range of Mount Lebanon runs north and south, that is, parallel with the Mediterranean, and to the east of Lebanon, beyond a deep valley, is the Anti-Lebanon. So, in a similar manner, the Nusairiyeh mountains are near the sea, north of Lebanon, and there is a range over against them, to the east, with a valley or pass between. Hence arises the importance of the place under discussion inasmuch as the power commanding the "entering in of Hamath" (Judges iii., 3) must needs be gate-keeper to the cross-roads. He has a passage to the north in direct communication with the neighborhood of Antioch; to the east and the desert; to the west and Mediterranean ports, and to the south, along the flank of Lebanon, the highway to all cities of Palestine.

No doubt the military instinct of such a man as Joab, or King David himself, would instantly catch the significance of such a situation, and we see from the narrative portions that David did attach much importance to the occupation of Hamath. "And David smote Hadarezer, King of Zobah, unto Hamath,

as he went to establish his dominion by the river Euphrates." (I. Chronicles xviii., 3.)

This verse is significant. It does not mean simply that David captured the place on his way, as he might take any place that stood in the path of his conquests, but it implies that he appreciated fully the importance of the place as a stepping-stone to ulterior designs.

The other focus of Hittite military movements is a place on the Euphrates, near the confluence of the Chebar (Khabour), and this name also suggests the high estimate of its strategic character: Carchemish—Fortress of Chemosh—a place where many a terrible battle was fought, and many decisions reached by the sword, involving the fortunes of states. It is not strange that in that vicinity the prophet Ezekiel saw in vision a valley full of bones! (Ezekiel xxxvii., 1.)

It was at Carchemish that the Egyptian host of Pharaoh-necho met its final overthrow at the hands of Nebuchadnezzar, B.C. 605. (See Jer. xlvi., 2.) Few commanders would venture to cross the Syrian desert, and for that reason the communication of the entire Euphrates valley with the Mediterranean coast must be by way of the north, passing around the desert instead of crossing it. As that part of Syria, together with a portion of Asia Minor at least, was under Hittite control, it is easy to see how inevitably the ambition of Nineveh and Babylon would bring them into collision with the occupants of Carchemish and Hamath.

It is plain that the Hittites could not make head permanently against the great Shemitic empires. It is surprising that they maintained resistance so long. What degree of importance should be attached in the historical sense to this remarkable state, known to us in connection with the name of Heth?

First: As to the extent of Hittite authority. Nearly two thousand years before Christ, we find the children of Heth referred to in Palestine as the "people of the land." "And Abraham stood up and bowed himself to the people of the land, even to the children of Heth." (Genesis xxiii., 7.) By a single comparison of texts, looking at the tabular statement in the tenth of Genesis, verse 15, we learn that this Heth was not of the

kindred of the Hebrews, but of the race of Ham. (Ham, Canaan, Heth.) "And Canaan begat Sidon his first born, and Heth."

For centuries the tenth chapter of Genesis has been referred to by many as a mere fragment of Jewish ecclesiastical ignorance, yet within the last few years the best scholarship which the British Museum can command has arrived at the conclusion, from a study of Hittite proper names, that the Hittites must be a non-Shemitic people. If our faith in the documentary value of Genesis were in need of strengthening, this fact might be regarded as important.

Further, we find on the monuments of Egypt and Mesopotamia many references to this Hittite state, and the names of some three hundred different towns and cities mentioned! This is a large number, as the victors would scarcely take the trouble to engrave the names of insignificant or worthless towns.

Catalogue of the Hittite army opposed to the Egyptian monarch Rameses II., the Conqueror (Sesostris of the Greek writers), (Pentaur, Theban poet): "The king of the hostile Kheta had assembled with him all the people from the uttermost ends of the sea to the people of the Kheta. They had arrived in great numbers, the people of Naharaim, the people of Arathu, of the Dardani, the Masu, the Pidasa, the Malunna, the Karkish, the Leka, Quazuadana, Kirkamis Akarith, Kati, the whole people of Anaugas, every one of them, Mushanath and Kadesh. He had left no people on his road without bringing them with him. Their number was endless. Nothing like it had ever been seen before." (Wright, p. 106.)

It seems that a grand combination of armies must have been in this case led to battle by a chief of the Hittites, for throughout the narrative of Pentaur and in the treaty of peace which followed, this is the state of affairs recognized. It does not follow that all the races named were under the authority of the children of Heth in time of peace, but it is plain that in a time of threatening danger, when the host of Sesostris was invading Asia, that all these combined states, great and small, recognized the hegemony of the children of Heth, and allowed them the place of honor on the field of battle.

This point is not brought out clearly in Dr. Wright's book. There is a very great difference between the temporary union of allied states in a crisis of supreme peril, and a genuine imperialism that is allowed in time of peace. France is not a fief of the crown of England, although French soldiers did fight in the Crimea against Russia.

A similar remark is applicable to this book in its allusions to the inscriptions scattered over the hills and valleys of Asia Minor. We may allow freely that they are Hittite remains, but it would be a very different thing to allow that any single, continuous and self-centred Hittite empire held the whole of that territory at once. I do not believe that any such continuous empire existed. I do believe that a large number of scattered tribes, of the common Hittite origin and stock, had wandered over Asia Minor (not necessarily at one moment), and of course left here and there a monument, or a tombstone.

A close and interesting parallel may be seen in the many different tribes that occupy the territory of Arabia. Tribal feuds exist, tribal wars are waged, tribal traditions are obeyed; yet all the Arabs are in one sense a people: they may be called a people with reference to any period of their history, but they cannot be properly called an empire, except at certain particular times—times when a man of force or genius arose and created an empire.

I suppose these wandering tribes of Arabs furnish the best available illustration of the early Hittite period. This marked difference, however, must be noted, and its importance felt—that Arabia is a land adapted for men of nomadic life, and Asia Minor for farmers. The difference arising from this is vastly more important than that which arises from the racial origin.

Sir Charles Wilson says (p. 85): "I fully agree with Professor Sayce, in considering that the Hittites of Northern Syria and Palestine were intruders, and that they came from the Anatolian plateau east of the Halys, which was occupied by Hittite tribes from the Black Sea to the Mediterranean."

This remark would tend to confirm the notion of a people partly nomadic in character, rather than the consolidated empire suggested by the material brought together by Dr. Wright.

It seems to me impossible that any empire of such a magnitude could have escaped the notice of the Greek writers. (Compare Greek notion of Colchis.)

We know positively that a long conflict for the territory of Canaan did rage between the Hittites and other tribes, as particularly, the Amorites. And we see in the history curious points for confirmation, *e.g.*, "And the house of Joseph, they also went up against Bethel, and the Lord was with them." "And the man (to whom they showed mercy) went into the land of the Hittites, and built a city, and called the name thereof Luz: which is the name thereof unto this day." (Judges i., 26.)

Such a remark as this shows us plainly how far south the "land of the Hittites" extended in the days of the "elders who overlived Joshua." It *did not extend* to Bethel. Furthermore, the failure of all efforts to identify this second "Luz" with any place in central or Southern Palestine, and the curious remark about the unintelligible "speech of Lycaonia" in Acts xiv., 11, taken together with the proper name of the city Lystra (Gr. *Λύστρα*) all these facts suggest the inference, that the "land of the Hittites" lay, not on the flank of Mount Lebanon, but to the north of Lebanon; that the "Luz" of Judges i., 26, is the Lystra of Acts; and that the Lycaonians, whose speech was not intelligible to the Apostles, were the veritable Hittites of the Old Testament. As we have remarked, this race was of a Hamitic origin, and hence differed in speech from the Hebrews, as well as from other races inhabiting Palestine. War was the result, in many cases, and the sacred writers refer to these struggles briefly. The eighth chapter of Second Samuel is a very interesting account of a war waged by king David with a monarch named Hadadezer son of Rehob, king of Zobah. "And when the Syrians of Damascus came to help Hadarezer king of Zobah, David slew of the Syrians two and twenty thousand men" (I. Chron. xviii., 5). "When Toi, king of Hamath, heard that David had smitten all the host of Hadadezer, then Toi sent Joram his son unto king David, to salute him, and to bless him, because he had fought against Hadadezer and smitten him: for Hadadezer had wars with Toi" (II. Samuel viii., 9).

From this narrative it is manifest that Hamath, Zobah, and Damascus were at this time three independent states.

But a few years later, in the days of Solomon, it was not so, for we read in II. Chron. viii., 3, thus: "And Solomon went to Hamath-Zobah, and prevailed against it."

The use of a singular termination in this phrase in the Hebrew, "Aleyhah" (not plural), is a plain proof that in the days of Solomon the two states had become one. (See different interpretation in Lange.) Such a gradual alteration of the boundaries is just what we would expect, but the striking fact is, that after suffering such a defeat at the hands of David they were able to fight at all against Solomon!

In the first chapter of the book of Joshua we read thus: "Every place that the sole of your foot shall tread upon, that have I given unto you as I said unto Moses. From the wilderness and this Lebanon, even unto the great river, the river Euphrates, all *the land of the Hittites*, and unto the great sea, toward the going down of the sun, shall be your coast" (Joshua i., 3, 4).

This expression, whether written by Joshua or not, has been ridiculed, as a palpable exaggeration having no historical foundation in the facts of that day. The objection was twofold: First, that the territory designated, lying between the Euphrates and the Mediterranean, was not properly called the land of the Hittites: and second, that the Hittites were not the principal foes of Israel during the war of invasion. In short, the importance of this race, or people, is overstated in the Scriptures. But within a few years past the inscriptions examined lead us to the conclusion quite independent of anything in the Hebrew books, that there was a wide territory lying exactly in that neighborhood, that is, north of Palestine, and east of Assyria, known as the country of the Khatti, or Kheta, and that the power of this people extended to such a degree in Asia Minor that no specific limits can be confidently assigned. The forces that were actually brought into the field by them are fully recognized on the monuments both of Nineveh and of Karnak, and there is mention made of them so frequently as to lead fairly to the conclusion that they maintained the position of a great rival state. For example, in one case a treaty was made by the Egyptian king with the Kheta, in which a large tribute, or

indemnity, was required, and in this indemnity a single item consists of eight rings of massive silver, weighing together three hundred and one pounds. It cannot be that they were an insignificant people who are referred to thus on Egyptian monuments.

It would be expected as a matter of course that the proper names occurring on these monuments, as also in the Scriptures, where the Hittites are referred to, would aid us greatly in the investigation. But there are several specific difficulties that beset the most careful inquirer. Some of the names applied to Hittite characters are evidently pure Hebrew; and we are led to infer that the custom was, at least in some cases, for a man who was widely known to recognize two names, the one Hamitic, the other Shemitic: one in use among the foreigners, the other in use at home.

Another difficulty in the prosecution of this study is that there are two uses of the very word "Hittite." The one is broader, more comprehensive; the other is narrow, specific. The difference is closely analogous to the double use of the word "ship" in English. Let the question be asked, What is a ship? One man replies, Any sea-going craft; another says, A ship is a vessel with three masts, all of them square rigged. So, a house may signify any sort of dwelling-place, or it may mean the specific lineage of a nobleman. It is in like manner pretty clear that a double use did attach itself to the term Hittite. In the more comprehensive sense, as where it is used by Joshua in the first chapter of his book, it is a racial term, a sort of territorial designation, applying to many of the tribes descended from Ham and occupying land on the slopes of Lebanon and Taurus. It is not accurately racial, for it does not include all Hamitic tribes; and it is not strictly territorial, because it covers, now more, now less; but it has a share in each of the two notions, and fairly indicates what Joshua intended at that moment to point out.

But in the narrower sense it is the name of one particular tribe, having its headquarters in northern Syria, and exercising a hegemony over other tribes, more or less distinct and emphatic, from age to age, as a leader arose qualified to enforce authority. This affords an explanation of several phenomena, which are

otherwise very difficult. Why is all the land promised to Israel called in Joshua i., 4, the land of the Hittites, while in many other passages the same territorial promise is coupled with the names of many tribes? Is it not because the term was used at the time in both ways? According to this hypothesis a man may be called a Hittite, and soon after by the same writer, a Hivite; just as the same person may be called indifferently a citizen of New York, or a citizen of the United States. This suggestion is made by Hengstenberg (quoted in Lange) relative to the names of the wives of Esau. The confusion is only apparent, not real. The generic term or the specific may be employed and the writer is correct in either case. "And Esau was forty years old when he took to wife Judith, the daughter of Beeri, the Hittite, and Bashemath, the daughter of Elon, the Hittite: which were a grief of mind unto Isaac and to Rebekah" (Gen. xxvi., 34, 35). "Esau took his wives of the daughters of Canaan, Adah, the daughter of Elon the Hittite, and Aholibamah, the daughter of Anah the daughter of Zibeon, the Hivite" (Gen. xxxvi., 2, 3).

In these two passages the same wife is called Bashemath and Adah; and the other one is called Judith and Aholibamah; while the daughter of Ishmael, still another wife of Esau, is called Mahalath, and Bashemath. Is it not reasonable under such circumstances to assume that, where Hittites had been married to members of the Shemitic family, each individual had two names, and that they used both, all the time? Furthermore, this Beeri, the Hittite, may very well be identical with the person called Anah, for a very slight change in one letter would alter the Hebrew word from "son" to "daughter," or from "daughter" to "son." We know from many passages that Anah is the name of a man; as Gen. xxxvi., 24: "This was that Anah that found the hot springs in the wilderness, as he fed the asses of Zibeon his father."

The name Beeri (*beer*, a well) seems to identify this Anah of Genesis xxxvi. with the person named in chapter xxvi. If this view be accepted, that Beeri is the same as Anah, then verse second in chapter thirty-six should read: "Aholibamah, the daughter of Anah, the *son* of Zibeon, the Hivite."

Arabs of our own time do not unfrequently give to individuals such designations, and "The man who lived by the well" would be a very natural way to indicate a well known personage, the son of the tribal chief, Zibeon.

The identification of proper names is one of the most difficult, as well as one of the most interesting branches of archæology, and it may be worth while to call attention to one aspect of the case, by which the confidence of many students in such identification has been impaired. This point of view is the vital difference between the vowels of a name and the consonants. The latter are of the utmost importance; the vowels are of very little consequence indeed. The explorer, who would unravel the mysteries of the names attached to places in the Holy Land, must not be misled by apparent resemblances in the sound; for the sound of any word, proper name or not, is largely determined by its vocalization; while the old Hebrew names of places, if preserved at all, will be embalmed in a form which at the outset seems very discouraging. The old consonantal stem of the word is there, but it is disguised under a new set of vowels.

When Dr. Robinson and Dr. Eli Smith took their ever memorable ride through the Holy Land in 1838, they pursued essentially the right plan, with very happy results. The best way is to ask intelligent natives questions of the narrowest sort, relating to the place where the man lives: What is the name of this place? The reply will be prompt, and the common name, in use among the people, will be given. Behind the disguise of a false set of vowels will be found in many cases the old Hebrew consonants, the very thing sought. But if, on the other hand, a broad general question be put as to some ancient name, pronounced in a way that is unfamiliar to native ears, the mind of the native is confused. He may know perfectly the point in question, but the vowels that are not familiar throw him off the track, and yet, not wishing to appear ignorant, he says, "O yes, I know where it is." If the traveller were to ask such a man: Do you know where Chicago is? he would probably reply, Yes, I know; it is over the hill a little way. Many things there are which he does not know, but even that which is perfectly familiar to him, will be useless to the occidental mind, unless the

Arab be allowed to give expression to what he knows in his own way, giving all names in the current Arabic.

The southern end of Syria, Palestine proper, has been very thoroughly examined on this plan, but much remains to be done in the northern portion. The territory which appertains to Damascus, to Hamath, to Antioch, and to many other cities, ancient and mediæval, must be searched after the plan of Dr. Smith and Dr. Robinson, and then we may hope for many identifications not hitherto appreciated or expected. So in Asia Minor there is yet a field for the highest grade of exploration, and for the researches of some really qualified workman, who must combine classical knowledge with a ready command of the modern languages in use in different sections of the Turkish empire. One type of civilization overlaps another in Asia Minor, and this new zeal felt by some European scholars for the recently discovered Hittites and Trojans may be the means of still richer discoveries in archæology.

The study of archæology has this advantage over some other departments of research, namely, that the value of the facts discovered is not impaired by delay; and the student can afford to wait, because one fact, not intelligible by itself, will suddenly spring into a new significance, by reason of some other, just now brought to light. The silver boss of Tarik-Timme may not turn out so useful as we hope, yet it is quite possible that in some other way it will prove to be of great service.

In the decipherment of the Hittite inscriptions, Professor Sayce, Dr. Isaac Taylor, and others, are agreed on a certain view of the suffixes employed, which they regard as equivalent to a demonstration of the non-Semitic character of these people. So, from year to year as one point after another is fixed after due conference, real progress is made, and our wonderful advance in Assyrian and Egyptian decipherment very greatly encourages us to persevere in the new lines just opened up for examination.

The characteristic boot, with toes turned up, which appears in various inscriptions, all the way from Karabel (near Smyrna) to the wall pictures of Karnak, seems to indicate an origin in the north, and long familiarity with deep snow. But is not this a little uncertain? May we not stumble upon some better explanation?

Not only was the territorial extent of this people very considerable, but the duration of their influence is noteworthy.

According to some of the Nineveh tablets recently deciphered, the definite dates run back to B.C. 3800 (?). Professor Sayce says (p. 37): "Already in the astrological tables of Sargon of Agane, in the nineteenth century B.C., the Hittites are regarded as a formidable power."

Passing over a thousand years to the time of Assur-Nasir-Pal, king of Nineveh (B.C. 883–858), we find him levying a tribute from the Hittites of "twenty talents of silver, one talent of gold, one hundred talents of tin, one thousand oxen, ten thousand sheep," etc.

The systematic boasting of kings must always be discounted in a systematic way; but we may be assured that when Nineveh and Egypt took so much pains to make the Kheta pay tribute, there was some national force at work resisting vigorously these plans of the two great states mentioned.

Shalmaneser, the son and successor of Assur-Nasir-Pal, records one battle in which he met the combined armies of the Hittite king, Irkhulina, of Hamath, and Rimmon-Idri (Benhadad), of Damuscus, and these two being defeated by Shalmaneser, lost twenty thousand five hundred men "slain with arrows."

Second: The strength of the Hittites on the field of battle. This point becomes an important one when we weigh the criticisms of those who would discredit the allusions of the Old Testament to the dread of Hittite interference referred to in II. Kings vii., 6.

What is the testimony of the monuments?

The most ancient Assyrian text inscription of any considerable length is that known as the Kelah-shergat inscription. (Time of Tiglath Pileser I.) In this we read a catalogue of spoils taken from the Kheta, and there mention is made of one hundred and twenty war chariots "fitted to the yoke" which signifies, I presume, that the horses were taken with the chariots (B.C. 1130).

So in the time of Shalmaneser, a contemporary of the king of the ten tribes Ahab, a long inscription was cut by his orders on the famous stone now in the British Museum, which was

brought from Kurkh, on the Tigris river. In this inscription it is recorded that Shalmaneser carried away from Hamah, the Hamath of the Bible, "seven hundred war chariots." And long before that date the assertion was made by Thothmes III., in his Karnak inscriptions, that he had taken from the Hittites in the battle of Megiddo (1600 B.C.) nine hundred and twenty-four chariots, besides the golden chariot of the king. That they were formidable on the field there can be no doubt, nearly all the references to them being of this military character. For example, in Homer (following Mr. Gladstone) we have the name of the children of Heth in the slight disguise of "Ketæan," Ket, cf. Het, Heth.

> "The time would fail should I in order tell
> What foes were vanquished, and what numbers fell;
> How, lost through love, Eurypylus was slain,
> And round him bled his bold Ketæan train."
>
> POPE'S HOMER, Od. xi., 521.

The military prestige of the Hittites is thus referred to by Mr. Gladstone in his letter regarding the allusion to them in the Odyssey:

"I may add to the suggestion which I first published in fear and trembling, that the manner of the mention in Homer is completely in accord with your doctrine as to the greatness of the Hittites. (1) Because the slaughter of their chief seems to be the crowning exploit that had been performed by the son of Achilles. I will not, says Odusseus, name all that he slew, but only the hero Eurypylus. (2) Because the Keteioi are named without epithet, description or indication, which accords with the idea of their being a famous and well-known race."

The son of Achilles here alluded to by Mr. Gladstone is Neoptolemus, who vanquished the Hittites.

There seems to be a recognition of their military superiority in the report of the spies (see Numbers xiii. and xiv.), who did indeed disgrace their faith, but we are not told that the facts reported by them were incorrect. On the contrary, the impression left on the mind is that ordinary human judgment would have followed the line of reasoning indicated by the ten spies rather than that of Joshua and Caleb.

There were several foci to this Hittite state, and the condition of the people was not the same from age to age. Let us examine a single case which falls well within the range of our information.

Early in David's reign he made war on Hadarezer, King of Zobah, and having defeated him, he captured a thousand war chariots and took prisoners twenty thousand foot soldiers. Yet in I. Chronicles xviii., 10, we learn that these two kings—Tou, King of Hamath, and Hadarezer, King of Zobah—were old rivals and had been well matched on the field of battle, in spite of the sympathy which was felt for Zobah on the part of the Syrians of Damascus. It is not quite clear from that passage whether both of these states, Hamath and Zobah, were kindred in blood or not. But we may infer from the way in which the mention is made of assistance from Damascus that this dynasty that fought against King Tou was of Damascene origin.

But the end came at last, and that at the hands of Nineveh, the ancient foe of the Kheta.

A remarkable man, known to history as Sargon, took possession of the throne of Assyria and put the armies of rival states to flight. Sargon is interesting to us as the father of the Sennacherib named in the Bible. His usurpation took place in the year B.C. 721, and in the year 717 was fought the battle of Carchemish (one of many battles fought at that place), which brought to a close the political life of this curious state.

This was by no means the end of their influence or of the use of the term, for, more than a century later, the prophet Ezekiel, writing from Babylon to rebuke the men of Jerusalem, says: "Thus saith the Lord God unto Jerusalem, Thy birth and thy nativity is of the land of Canaan ; thy father was an Amorite, and thy mother a Hittite." (Ezekiel xvi., 3.)

The long contest between Hebrews, Amorites and Hittites had left a mark deep in the national consciousness of Israel. The melancholy part of the story, from the point of view of a Hebrew prophet, was that the foreign influence invariably tended to error and particularly to idolatry. This was true whether they were at war with Israel or in submission, as in the days of Solomon. The imperialism of Solomon, which was the enter-

ing wedge of Shemitic supremacy among the children of Ham and of Japhet, along with its unquestionable advantages and benefits, brought countless disadvantages in its train. "For he had dominion over all the region on this side the river, from Tiphsah even unto Azzah (Gaza); over all the kings on this side the river (*i. e.*, the tribal chiefs, including Hittites), and he had peace on all sides round about him." (I. Kings iv., 24.)

Yes, peace, but with it rapid moral deterioration and national disintegration!

Nevertheless, God rules, not man; and all the mistakes of Solomon, Ahab, Ahaz and the puppet kings who succeeded could not break up the divine plan nor alter the current of that which had been determined. The doctrine of the sixtieth Psalm is vital in connection with this question of the relation of Israel to heathen states. God rules over the Hittites just as truly as He rules over Judah; and when more light is shed on the history of these strange Hamitic tribes, when we understand the connection of one part of the narrative with another, then we shall apprehend what was the service they were appointed to render to the children of Abraham, and how they did really affect the religious life of Jerusalem. "Gilead is mine, and Manasseh is mine; Ephraim also is the strength of mine head; Judah is my lawgiver; Moab is my wash-pot over Edom will I cast out my shoe: Philistia, triumph thou because of me."—Psalm lx., 7. 8.

When the planet Neptune was discovered by Leverrier and others, an explanation was afforded of certain phenomena that had appeared insoluble to the astronomical world before. So, when this Hittite empire was brought to the notice of scholars, some passages in ancient literature became intelligible which had always baffled the commentators.

It seems that in the period just before the occupation of Palestine by Israel, these fierce and powerful Hittite tribes had been seriously encroaching on their southern neighbors, that is, on the Canaanites (lowlanders) and on the Egyptians. And as they advanced from time to time, they established themselves and fortified their towns, as we might expect, each fortified place being in a sense the nucleus of Hittite development and a sort of national boundary. When the spies visited that part

of the Promised Land which lies toward Egypt, they must have seen these fortified towns of the Hittites, and so the remark is found in Numbers xiii., 22: "Now Hebron was built seven years before Zoan in Egypt." Zoan was the capital of one of the foreign dynasties that tyrannized over Egypt, and called, for want of a better name, the "Shepherd Kings," and one of the explorers, Mariette Bey, is confident that one of those foreign dynasties was Hittite. If the two hypotheses be accepted and laid side by side, we have a full explanation of the puzzling verse in Numbers. For, if they were an advancing and a dangerous foe, and having built a city among the Canaanites were still ambitious and pressed on to occupy a part of Egypt, then we can understand why Moses should take the trouble to write: "Now Hebron was built seven years before Zoan." Moses was glad that they were *not moving on any faster*, and he remarks, by inference, that the Hittite progress has been in some degree arrested. Having built Hebron, it was seven years before they ventured to move on and claim territory in the land of the Pharaohs.

So the venerable legend of the Amazons is cleared up at last, if Professor Sayce is correct: "The Hittite priestesses who accompanied the worship of the goddess (Astarte), as it spread through Asia Minor, were known to Greek legend as Amazons. The cities founded by Amazons, Ephesus, Smyrna, Kyme, Myrina, Pitane, were all of Hittite origin. In early art the Amazons are robed in Hittite costume, and armed with the double-headed axe; and the dances they performed with shield and bow, in honor of the goddess of war and love, gave rise to the myths which saw in them a nation of woman warriors" (p. 74).

The precise degree of importance that should be attached to Hittite influence in the formation of the Greek alphabet, for example, and many other like questions of varying significance, awaits determination not simply by the decipherment of specific inscriptions, but by the careful comparison of facts known to us already; for it is by this means, by a rigid and a patient cross-examination of the facts, that valuable results are reached in any department of historical inquiry.

Of one thing, however, we may be certain: the dignity of

biblical archæology is daily augmented, and each discovery made, each error corrected, each new hypothesis proved or disproved adds to the zeal with which we study the Word of God.

As we inquire into that which God has done, and that which He has spoken, the range continually widens, till we awake to the thought that the universe only limits our curriculum, and that our goal is immortality.

MONOSYLLABIC POEM.

ATTRIBUTED TO PROF. ADDISON ALEXANDER.

THINK not that strength lies in the big round word,
  Or that the brief and plain must needs be weak.
To whom can this be true who once has heard
  The cry for help, the tongue that all men speak,
When want or woe or fear is in the throat,
  So that each word gasped out is like a shriek
Pressed from the sore heart, or a strange wild note
  Sung by some fay or fiend? There is a strength
Which dies if stretched too far or spun too fine,
  Which has more height than breadth, more depth than length.
Let but this force of thought and speech be mine,
  And he that will may take the sleek, fat phrase,
Which glows and burns not, though it gleam and shine—
  Light, but no heat—a flash, but not a blaze!
Nor is it mere strength that the short word boasts;
  It serves of more than fight or storm to tell,
The roar of waves that clash on rock-bound coasts,
  The crash of tall trees when the wild winds swell,
The roar of guns, the groans of men that die
  On blood-stained fields. It has a voice as well
For them that far off on their sick-beds lie;
  For them that weep, for them that mourn the dead;
For them that laugh, and dance, and clap the hand:
  To joy's quick step, as well as grief's slow tread,
The sweet, plain words we learnt at first keep time,
  And, though the theme be sad, or gay, or grand,
With each, with all, these may be made to chime,
  In thought, or speech, or song, in prose or rhyme.

MEETINGS OF THE INSTITUTE.

By Charles M. Davis, Secretary.

The Monthly meeting held February 5th, 1885, was called to order by Prof. Henry M. McCracken of the New York University. The devotional exercises were conducted by Rev. James F. Riggs, of Bergen Point, New Jersey.

The Secretary announced the death of two of its members since the last meeting. On the 13th of January, William Anderson Scott, D.D., LL.D., Professor in the Theological Seminary of San Francisco, California, died at his home in that city. On the 11th of the same month occurred the death of Mr. Samuel S. Constant, a life-member from the first year of the Institute.

Prof. Francis Brown, of Union Theological Seminary, read a paper entitled, "Our Knowledge and our Guesses about the Hittites." The address was listened to with marked attention, both from the peculiar character of the subject, and the lucid manner in which it was presented. Rev. James F. Riggs, a son of Rev. Dr. Riggs, of Constantinople, and who has given careful study to the subject, confirmed the views taken by Prof. Brown. Prof. McCracken and Hon. A. B. Conger joined in the discussion.

The Annual Sermon in behalf of the Institute was preached in St. Thomas' Church, on Sabbath evening, the 18th instant, by Rt. Rev. Samuel S. Harris, Bishop of Michigan. The sermon was a very fine and dignified discourse from Gen. i., 26, 27. Bishop Harris dealt in a spirit at once friendly and fearless with the most advanced scientific views, while he developed very forcibly and ably the doctrines of man's spiritual nature and necessities, both for this life and that to come. Assistant Bishop Potter of New York presided, and followed the sermon with remarks expressing his interest in the Institute and its work, and his hearty co-operation with it. He thanked the preacher for his admirable address, and said that the Institute of Christian Philosophy had been organized to get at those fundamental truths which more especially concerned society and man. Its members were not confined to any one denomination, but embraced, in addition

to various bishops of the Church, eminent scholars and professors throughout the country. In speaking of what the Institute is doing, the bishop said that its publications had already been sought for by some of the scholars in Japan, who were now especially turning their thoughts to the Christian religion as the religion of the country.

In the absence of the President, Rev. Dr. Deems, the Rev. Edward M. Deems was called to preside at the meeting held on the 5th of March. The devotional exercises were conducted by Rev. Dr. S. Irenæus Prime.

The paper of the evening was read by Abraham Coles, M.D., LL.D., of Scotch Plains, N. J.; it was entitled, "A Half-Hour with the Evolutionists." An animated discussion followed, led chiefly by Mr. S. N. Wilder, Hon. A. B. Conger, Rev. Dr. J. H. Rylance and H. E. Sharpe, Esq. After the discussion Dr. Coles made some closing remarks.

MEMBERS.

The following are the names of persons who have become members since November 9th, 1884: Rev. Dr. Thomas M. McWhinney, Franklin, Ohio; Prof. Wm. P. Trowbridge, Ph.D., LL.D., Columbia College; Rev. J. O. Peck, A.M., D.D., New Haven; Samuel K. Harriman, M.D., Natick, Mass.; Thos. W. Bicknell, A.M., LL.D., Boston, Mass.; William Tucker, D.D., Camden, Ohio; Pres. Wm. C. Bowen, Bordentown, N. J.; Lemuel Skidmore, B.A., LL.B., New York; Mrs. Janet Ruutz-Rees, New York; Prof. John G. Lansing, Rutgers College, N. J.; Rev. Francis M. Edwards, Coman's Well, Va.; Prof. George R. Cutting, Auburn, N. Y.; Theodore F. Pierson, E. Orange, N. J.; Horace Waters, New York; Rev. Gilbert R. Brackett, D.D., Charleston, S. C.; Rev. John B. Drury, D.D. Ghent, N. Y.; Prof. Robt. L. Dabney, M.A., D.D., LL.D., University of Texas, Austin, Texas; William A. Boyd, A.M., Esq., New York; Haynes L. Richardson, M.D., New York; Lorettus S. Metcalf, New York; William H. Parsons, New York; Abraham Coles, M.D., Ph.D., LL.D., New Jersey; John J. F. Randolph, New York; Rev. Charles F. Thwing, Cambridge, Mass.; John F. Spence, M.A., S.T.D., Knoxville, Tenn.; Thomas D. Witherspoon, A.M., D.D., LL.D., Louisville, Ky.; President I. S. Hopkins, Emory College, Oxford, Ga.

DEATHS OF MEMBERS.

During 1884: May 5th, N. Norris Halstead, Newark; W. J. Hutchinson, New York; September, Rev. G. W. Horn, D.D., Colorado Springs, Col.; October, Rev. Henry M. Collinson, Chicago. In 1885: January 11th, Samuel S. Constant, New York; January 13th, Prof. Wm. A. Scott, D.D., San Francisco; January 28th, Wm. H. Seat, D.D., Goliad, Texas.

OUR LETTER BOOK.

FROM G. F. M., IOWA COLLEGE, we have received the following acute observations:

In Mr. Burroughs' thesis (January–February No., p. 312), it is assumed that motion is, or might be at least, the passing into space from without space. Thus, "If infinite matter occupies infinite space, there cannot be motion; *for*, in that case, there cannot be space for matter to move into, and therefore there cannot be motion." Now, no such idea of motion has ever been entertained by philosophers even, not to say men at large. It has always been change of position in, or within, space that has been meant by the word "motion," or, as the popular phrase is, change of place—by "place" relative position in, or within, space being meant. Indeed, it is pretty clear that when one seems to conceive of a passage from without into space by a body, or a molecule of matter, he really conceives that somewhere "without" from which the body or the molecule comes, as an outer space! And he cannot help doing so as long as space is necessary to the existence of matter as possessing (even infinitesimal) extension. Moreover, motion is conceivable in space filled with matter, *e. g.*, a portion of space filled with fluid or liquid matter, the molecules interchanging places among themselves. Suppose infinite space filled with infinite matter—whatever either of these might be (for one, I do not believe in the infinity of either, in the proper sense of the word "infinite")—or say, suppose either as mathematically infinite, and the one —the matter—entirely filling the other—the space; then, as the matter must be molecular and need not be solid, interchange of place would be possible among the molecules. But interchange of molecular position in space requires motion, or the passage of molecules from point to point in space. Then "infinite matter," so called, would not prevent motion. Moreover, there is no reason for denying to so great a mass of matter as Mr. Burroughs supposes, the existence of part of it, at least, in fluid form. Indeed, as the finite matter we are acquainted with is partly in such form, matter could hardly be supposed to be "infinite" without containing fluid as well as solid forms of matter. Some of it, we may suppose, would be æriform. Change of relative position then, and motion, would necessarily be possible in so much of it as would be æriform or fluid. No increase of space, no moving into space from without

is needed. Even the solid portions of "infinite" matter could change places with the fluid or æriform portions. Then Mr. Burroughs' inference is a *non sequitur*. In other words, "space unoccupied by matter" is not necessary to all motion, only to a particular conception of motion. *i. e.*, of a surplus over and above "infinite matter"—which is itself inconceivable. Indeed, to me "infinite matter," in the proper sense of words, is itself inconceivable, and this is a better argument than that here referred to against the identity of infinite mind, or God, with matter.

REV. H. LOOMIS writes as follows from Yokohama, Japan:

"I see in the papers that one or more of the articles read before the society of Christian Philosophy, has been solicited for circulation in India. It is my impression that it is also well adapted for circulation in Japan, and I would request that we might be favored in the same manner, as far as possible. I have no doubt that many of the papers issued by the Society would be of great value with us at this time. Events here are all tending towards a speedy conversion of this land to Christ. The spirit of inquiry is everywhere prevalent, and everything that tends to strengthen the Christian faith is in demand."

We desire contributions to furnish quantities of our publications for Japan. *Who will help?* No money is allowed to accumulate in our treasury.

REV. DR. HENRY D. MCCOOK: "My second suggestion is that your writers should adopt the scientific method of *full and careful quotation of authorities*. A scientific paper that should appear without citation to the original authorities, would be at once largely discounted. The evidence of *original investigation* and *comparison* of authorities lies in these citations; and to the *student* they are often the most valuable part of the paper. For *merely* popular effect this is not required, but for a really philosophical and scientific magazine, I think this point should be guarded."

Will gentlemen who are invited to prepare Papers and Lectures for the Institute make a note of this important suggestion?

MISS M. S. H., BOSTON.—This lady kindly calls our attention to a mutilation in our last number. To fill out page 315, from a number of clippings was taken a slip which had no title, and was marked "Unknown." The moment our attention was

called to it we knew that it was part of Whittier's "Trust." Miss M. well says that the extract ended "just where it should not, giving only the doubt and not the balm of trust; moreover it does not seem right for the words of that grand poet to be torn asunder." The remaining lines are—

> "I have no answer for myself or thee,
> Save that I learned beside my mother's knee;
> 'All is of God that is, and is to be;
> And God is good.' Let this suffice us still,
> Resting in child-like trust upon His will,
> Who moves to His great ends unthwarted by the ill."

The Institute is growing in demand. We have been invited to several places and have our plans laid for this year. But the following letter is under advisement for some future day. It is from the wife of Joseph Cook. She has been "standing guard" over that working-man's health, and she is a member of the Institute, and so we discreetly sought permission of the woman he belongs to, before inviting Mr. Cook to our next summer's course. This is her reply:

"23 BEACON STREET, BOSTON, Jan. 24th, 1885.

"Mr. Cook married a wife seven years ago and is just now building her a house at Lake George for a summer residence. If Dr. Deems will hold a session of the Christian Institute of Philosophy at Lake George, Mr. Cook will furnish for the use of the Association ten acres of original woodland and two lectures! He fears that he will have no leisure next summer. His work in connection with his Lake George residence will be on his hands. I think, therefore, you will be obliged to excuse him one more season, but I am certain his whole heart supports your Institute. He seriously hopes that your orators may come to Boston some winter and take his place in the Monday Lectureship and so give him a vacation for a single season."

Ten acres of original woodland are a temptation, especially at Lake George, more especially with two lectures thrown in, and most especially if like the woodland the lectures be original.

MEMORABILIA.

JOHN QUINCY ADAMS:—So great is my veneration for the Bible, that the earlier my children begin to read it, the more confident will be my hopes that they will prove useful citizens to their country, and respectable members of society.

DUKE OF ARGYLE:—Sir John Herschel has not hesitated to say, that "it is but reasonable to regard the Force of Gravitation as the direct or indirect result of a Consciousness or a Will existing somewhere."

BATCHELOR:—It would be easy to show that every doctrine expanded in the Epistles roots itself in some pregnant saying in the Gospels, and that the first intimation of every truth, revealed to the Apostles by the Spirit, came first from the lips of the Son of Man.

As all the great doctrinal features of the Epistles are found in germ in separate sayings of the Lord, so, also, the main outlines of the Apocalypse are given us in Parables and sayings which trace the future history of His kingdom.

DR. BUSHNELL:—Nature is not the proper system of God, but only an inferior, subordinate, and merely instrumental part, and, in that sense, a part complemental to the great supernatural empire in which the real system of God is centered. The physical order called Nature, is, perhaps, only a single and very subordinate term of that universal divine system, a mere pebble chafing in the ocean bed of its eternity.

DR. BUSHNELL:—If, now, the human person will express more of God than the whole created universe besides, . . . and if a motive possessing as great consequence as the creation of the world, invites Him to do it, is it any more extravagant to believe that the Word will become flesh, than that the Word has become, or produced in time, a material universe? . . . As

God has produced Himself in all the other finite forms of being, so now He should appear in the human.

CARLYLE:—One evening, at a small literary gathering, a lady, famous for her "muslin theology," was bewailing the wickedness of the Jews in not receiving our Saviour, and ended her diatribe by expressing regret that He had not appeared in our own time. "How delighted," said she, "we should all be to throw our doors open to Him, and listen to His Divine precepts! Don't you think so, Mr. Carlyle?" The sturdy philosopher, thus appealed to, said, in his broad Scotch, "No, madam, I don't. I think that, had He come very fashionably dressed, with plenty of money, and preaching doctrines palatable to the higher orders, I might have had the honor of receiving from you a card of invitation, on the back of which would be written, 'To meet our Saviour;' but if He had come uttering His sublime precepts, and denouncing the Pharisees, and associating with publicans and lower orders, as He did, you would have treated Him much as the Jews did, and would have cried out, 'Take Him to Newgate and hang Him!'"

COLERIDGE:—We have the highest possible authority, that of Scripture itself, to justify us in putting the question—whether miracles can, of themselves, work a true conviction in the mind. There are spiritual truths which must derive their evidence from within, which, whoever rejects, neither must he believe though a man were to rise from the dead. And under the Mosaic law, a miracle in attestation of a false doctrine, subjected the miracle-worker to death. Is not a true, efficient conviction of a moral truth—is not the creating of a new heart, which collects the energies of a man's whole being in the focus of the conscience, the one essential miracle, the same and of the same evidence to the ignorant and to the learned, which no superior skill can counterfeit, human or demoniacal? Is it not that implication of doctrine in the miracle, and of miracle in the doctrine, which is the bridge of communication between the sense and the soul—that predisposing warmth which renders the understanding susceptible of the specific impressions from the history, and from all other out-

ward seals of testimony? Is not this the one infallible criterion of miracles, by which a man can know whether they be of God? The abhorrence in which the most savage or barbarous tribes hold witchcraft—in which, however, their belief is so intense as even to control the springs of life—is not this abhorrence of witchcraft under so full a conviction of its reality, a proof how little of divine, how little fitting to our nature a miracle is, when insulated from spiritual truths and disconnected from religion as its end?

EMERSON:—Every book is a quotation; and every house is a quotation out of all forests, and mines, and stone-quarries; and every man is a quotation from all his ancestors.

The nervous language of the Common Law, the impressive forms of our courts, and the precision and substantial truth of the legal distinctions, are the contribution of all the sharp-sighted, strong-minded men who have lived in the countries where these laws govern.

FARRAR:—The guidance of the Holy Spirit of God was promised, not to one age only, but to the Church of all ages, even to the end of the world; but the lessons of century after century ought to have taught us, that guidance into all necessary spiritual truth is a very different thing from critical infallibility.

JOHN FOSTER:—Religion is utterly incompetent to reform the world, till it is armed with some new and mighty power; till it appears in a new and last dispensation. Men are the same they always were; and, therefore, till some wonderful event takes place, their affections will be commanded by sense in opposition to faith, by earth in preference to heaven

GOETHE:—I will listen to any one's convictions, but pray keep your doubts to yourself. I have plenty of my own.

GREGG:—The idea that a miracle can authenticate a doctrine . . . implies that our understanding is competent to decide whether *an act* be divine, but not whether a *doctrine* be divine;

that the power displayed in a prodigy may be sufficient to justify us in confidently assuming it to be from God, but that the beauty, the sublimity, the innate light of a doctrine or a precept cannot be sufficient to warrant us in pronouncing it to be from Him; that God can impress His stamp unmistakably on His physical, but not on His moral emanations; that His handwriting is legible on the sea, or the sky, or the flower, or on the insect, but not on the soul and intellect of man.

HEDGE:—The Simian may have been the successor of the degenerate human.

F. H. HEDGE:—There is no power in nature, or, in works of man's device, but God; no law but divine volition; no process but divine performance. Gravitation is one mode of Providence; magnetism, another; electricity, another; Providence is attraction and repulsion, cohesion and explosion, flood-tide and ebb-tide, sunrise and sunset, motion and rest. All the energies of nature are methods of divine activity, and all the phenomena of nature are phases of the one eternal Presence.

THOMAS À KEMPIS:—What availeth it to cavil and dispute much about dark and hidden things, for ignorance of which we shall not be reproved at the day of judgment?

MILL:—Human volition is constantly modifying natural phenomena, not by violating their laws, but by using their laws. Why may not divine volition do the same? The power of volitions over phenomena is itself a law, and one of the earliest known and acknowledged laws of nature. It is true, the human will exercises power over objects indirectly, through the direct power which it possesses, only over the human muscles. God, however, has direct power, not merely, over one thing, but over all the objects which He has made.

PROF. THOMAS A. RIVERS:—Nature . . . includes humanity, and therefore so far from being pitiless, includes all the pity that belongs to the whole human family, and all the

pity that they have accumulated, and, as it were, capitalized in institutions, political, social and ecclesiastical, through countless generations.

HENRY ROGERS:—Other . . . religions have never stood the tests of Christianity. . . . *That* is the great difference in calculating whether the influence of Christ is likely now to be destroyed. *They* perish before the influences which Christianity resists and surmounts; cradled in barbarism, nurtured by local and natural genius, they are *hybrids* of the religious instinct and poetic fancy, and like other hybrids, they cannot propagate. Military conquest, political revolution, shatter them to pieces; they do *not* pass from race to race, nor emigrate from clime to clime. What is still more fatal to them is advancing science; these things of darkness are at once transfixed by the shafts of light; the mythologies of Greece and Rome were laughed at long before they were finally extinguished; a score of mythologies more have perished since that day; at this moment Brahma and Vishnu are quaking on their precarious thrones; and old Buddha lies sprawling on the rivers of China.

LONDON TIMES:—Sentiment, let us remember, is as much a product of the contact of man with nature and with his fellow-man as science; and unless our Creator has forgotten us, or the universe is full of lies, there must be surely some reality in it and its products. In spite of all that science has done and made us believe, sentiment rules and will rule men far more than her severe and unsympathetic sister. The physiologist or the chemist may reduce to an equation the feelings which inspire us on looking up to the heavens on a cloudless midnight, or at the colors of the autumn woods, or the tender blue of the Alpine gentian, or when tiny hands play round our neck, or "Lead, kindly Light" rises to our lips in trouble and adversity, or when a man thinks of his dead mother, or the little church of his boyhood among the trees, or the sunny hillside; but that will never affect their reality for us. Whatever be the origin of this spiritual faculty, its workings make up most of our existence; it is the real source of all our joys and sorrows.

NOTATA.

WE have great respect for Prof. Harris and personal affection for Mr. Bronson Alcott, and could not slur our brothers of the other school; but even those gentlemen must have enjoyed the following verses: and if equal wit can be employed on the Christian philosophers as is here used toward the "Concord philosophers," it shall find a place in these pages. The Emersonians are represented as saying of themselves:

"Across the moorlands of the Not
We chase the gruesome When,
And hunt the Itness of the What
Through forests of the Then.
Into the inner consciousness
We track the crafty Where;
We spear the Ergo tough, and beard
The Ego in his lair.

"With lassos of the brain we catch
The Isness of the Was,
And in the copses of the Whence
We hear the Think bees buzz.
We climb the slippery Which bark tree
To watch the Thusness roll,
And pause betimes in gnostic rhymes
To woo the Over-soul."

IT is a very hard blow which Professor Flint directs against Herbert Spencer in one of his very weakest points. He says: "It is greatly to be regretted that professional critics and popular writers should have so generally gone to Mr. Herbert Spencer's chapter on Persistence of Force for enlightenment upon the subject of which it treats, although probably in no other eight consecutive pages in the English language are there so many physical and metaphysical errors combined."

EPICURUS, 300 B.C., seems to have been the first evolutionist in history. Lucretius in his poem, "De Rerum Natura" (A.D. 50 about), elaborated the theory. The poem was translated into French near the close of the eighteenth century, and into English in 1803 by Dr. John Mason Goode. Lucretius committed suicide at the age of fifty-seven.

THE Rt. Rev. Bishop Green, of Mississippi, is in his eighty-eighth year, yet on a recent visitation, he preached nineteen times, baptized eight, and confirmed thirty-three persons. The Rev. Dr. Mark Hopkins in his eighty-first year had a reception of the students of Amherst and such exercises on the occasion as showed a continuance of vigor and good spirits. Both these distinguished gentlemen are Vice-Presidents of the American Institute of Christian Philosophy. To argue that such a position guarantees longevity would be to follow the method of much modern thought; *nevertheless* we are fain to say that we regard it *very healthy* to be at least a member of the Institute.

AN agnostic, on learning that a distinguished and intelligent lady was a believer in the Holy Scriptures, professed to be surprised, and asked her, "Do you believe the Bible?" "Most certainly I do," was the reply. "Why do you believe it?" he again queried. "Because I am acquainted with the Author." This was her testimony; and all his talk about the unknown and the unknowable went for nothing in view of the calm confidence born of her personal acquaintance with God.

THERE have been 180 systems of chronology set forth by Biblical interpreters, as to the period which elapsed between Adam and Jesus, the lowest numbering 3,500 years and the highest 7,000. In other departments—Bunsen gives 20,000 years, Wallace 100,000 years ("Natural Selection"), Wartz ("Anthropology of Nations") from 9,000,000 to 35,000,000,000, Sir Charles Lyell "a vast series of antecedent ages."

THE infidels confess to constant defeat. One of their journals surveys the field of contest and says: "Throughout the whole length and breadth of the civilized world there is not a single nook or corner to be found in which the autocratic yoke of religion has been shaken off."

IN John Knox's "History of the Reformation in Scotland" occurs the passage, "How mercifully God hath looked upon this realm, retaining within it some *spunk* of His light even in the time of the greatest darkness." Does the word "spunk" occur earlier in English literature?

ABOUT BOOKS.

[In this department we shall make mention of recent publications, especially those in the line of our studies. There will not be space for extended review. The name of the book, its publisher, and its price when known, together with a brief statement of its drift will probably meet the demands of our readers.]

"THE LIFE AND TEACHINGS OF OUR LORD, IN VERSE" is the title of a work by Abraham Coles, M.D., LL.D., known to the world of literature and religion as the author of thirteen different translations of the famous "Dies Iræ." In this work the author has attempted a very difficult task, but we think the readers of this book will accord him high praise as poet, critic, and commentator. The notes are copious and valuable. The very turn of expression in many a line of the poem is itself a commentary on the sacred text. Dr. Oliver Wendell Holmes found the volume "an impressive and charming book." It is beautiful in its exterior, a large duodecimo, and is illustrated by a print of Munkacsy's famous picture of "Christ before Pilate." D. Appleton & Co., New York. $2.50.

"ISMS, OLD AND NEW." Under this title the eloquent Dr. Lorimer has prepared a series of discourses on Agnosticism, Atheism, Pantheism, Materialism, and twelve other "isms." He has treated them all with marked ability and in a style so clear, so bright, so earnest, and so popular that the book promises to be of great service to the truth. It is a book for family reading. Our readers would do service to truth by recommending this book to the young men of their acquaintance. Its sparkling grace will attract them. Some of the subsidiary titles to the chapters are very happy; as for instance: "Agnosticism, or the Impregnability of Ignorance," "Materialism, or the Theory of Mindless Mechanism," etc. $1.50. Chicago: S. C. Griggs & Co.

The fact that the "DEVELOPMENT OF ENGLISH LITERATURE AND LANGUAGE," by Alfred H. Welsh, A.M., has reached its

fourth edition is evidence of the call for the existence of such a work. Indeed there have been several of its class. But for thoroughness and fulness and good arrangement we know no book of its kind which quite equals this. It is very valuable not only for reference but also for continuous reading. The publishers, S. C. Griggs & Co., of Chicago, have brought out a university edition, two volumes in one ($3), which we cordially commend as a valuable addition to any library.

Bishop McTyeire, one of the Vice-Presidents of our Institute, to a discriminating judgment of rare power has added the experience of long practice with the pen. He was the man to be selected by the Centenary Committee of the Southern Methodist Church to write a "HISTORY OF METHODISM." It is really such and not a history of Southern Methodism. But it is a history of Methodism from the Southern stand-point. That is one of its chief advantages to a philosophical reader. The other histories of Methodism have been prepared from the English or the Northern point of observation. The Church divided in 1844. For the first time in fifty years we have a history from a competent, trustworthy and responsible writer who has always been in the Southern Church. It is well and thoroughly done and deserves a place in all libraries containing standard books on ecclesiastical history. The book is befittingly printed and bound. Price, $2. Southern Methodist Publishing House, Nashville, Tenn.

"THE AUTHORIZED REPORT OF THE NINTH CONGRESS OF THE PROTESTANT EPISCOPAL CHURCH," price $1, is published by T. Whittaker, 2 Bible House, New York. Its 242 pages 8vo. contain a number of well prepared papers and discussions by clergymen and laymen of ability. The subjects are important and the whole volume is worth the attention of scholars. The discussions considered are: (1) Authority and Conscience, (2) The Cathedral System in America, (3) Moral Education in Public Schools, (4) The Confessional, (5) Is our Civilization just to Workmen? (6) Agnosticism, and (7) the Mission and Evangelistic Preaching.

At his inauguration as the Gardner A. Sage Professor of Old Testament Languages and Exegesis, the Rev. John G. Lansing delivered an address of rare scholarship and force on the importance of the Arabic in the study of the Hebrew. In addition to this profoundly interesting paper, we have in the same pamphlet the excellent sermon delivered at the inauguration by the Rev. Dr. David Cole and the impressive charge to the new professor by Rev. Dr. John A. DeBaun.

"TRACES OF THE PLAN OF OUR BEING SO FAR AS REVEALED IN THE MENTAL PLAN," is the second edition of "THE MENTAL PLAN," by Prof. Lewis W. Mansfield of Cohoes, N. Y. The change of title is probably due to the suggestion of Rev. Dr. Joseph Cook, as appears in a letter published in the first edition. The author's object is to search for the plan of our being in the conditions of being. In doing this he follows the inductive method. Phillips & Hunt; price, 60 cents.

It may be late to say it, but "THE METHODIST CENTENNIAL YEAR BOOK," 1884, has just come under our notice. As Dr. W. H. De Puy was the editor, we naturally supposed that we should find very full and accurate information of all things pertaining to the Methodist Episcopal Church, but we have been surprised by the discovery of so much other valuable information that we esteem our copy a gazetteer and recommend the book to all who desire to have a complete reference library. It is published by Phillips & Hunt; price, $1.50. We shall place our copy in the Library of the Institute.

GENESIS—SCRIPTURAL AND EXTRA-SCRIPTURAL.

[A Lecture delivered before the American Institute of Christian Philosophy, at Key-East, N. J., July 15th, 1884.]

By Jesse B. Thomas, D.D., Brooklyn, N. Y.

THE "New Criticism" has, in its own opinion, completely dislocated the current theory as to the date and authorship of the Pentateuch. Its documents still remain venerable to be sure; for even the most extreme view, as held by Kuenen and Wellhausen, does not fix their origin this side of Ezra and the fifth century B.C. But to transfer the authorship from the time of Moses to that of Ezra is to ask the world to reduce by a thousand years an estimate which it had held unimpeachable for two thousand. This the new critics do without hesitation. But they are not content with approximate results. They fix on the year 444 B.C. as the exact time when the records took their present form, with as cheerful confidence as the great Chronologer determined by his system that the world was created on a certain day in September, at six o'clock in the afternoon. They go further. They proceed to decompose the whole series of books; and out of their elements speculatively to reconstruct a certain older "Book of the Covenant," "Book of Origins," etc. Assuming the garment to be not an old one with an occasional new patch, but a new one wholly made up of old patches, they attempt by a study of the shape and texture of these last to determine their relative age, and to reproduce the original garment from which each came.

In completing this process they venture to supply deficiencies, and to revise, to eliminate, or even upon occasion to contradict the particular statements of the writers upon whose authority they are dependent for the facts. It is recorded, for instance, in the book of Kings that Hilkiah "found the book of the law" in the temple. This is reiterated in Chronicles, it

being there added more specifically that it was the "book of the law of the Lord by Moses." Kuenen, however, assures us most positively that the book in question was our Deuteronomy; that it was not written by Moses, but by one of Hilkiah's own contemporaries, and that its alleged "finding" by Hilkiah, if it occurred at all, was probably a pious fraud.

The oracular tone in which these audacious conclusions are announced suggests that the critic may have supposed himself possessed of some "occult faculty of historical divination," such as Niebuhr and his school relied upon, according to Sir George Cornwall Lewis, in their revision of Roman history. Not so, however. The newness of the New Criticism (and its effectiveness also) is in the fact that it assumes to be strictly a criticism, that is to say, an inquiry conducted strictly in harmony with the conceptions and according to the canons of modern scientific thought.

Science asks two questions as to any alleged event: 1. Could it have occurred at all? 2. Could it have occurred at the date assigned?

For answer to the first she turns to the fixed order of nature; for answer to the second she turns to the equally fixed law of progress. In her realm a miracle and an anachronism are alike incredible—they belong alike to the supernatural: and there is no science of the supernatural. Adopting these conceptions, Kuenen lays down the cardinal rule that "to be acknowledged as real, every fact must fit into its place in the *historical connection.*" He therefore rejects the Genesis narrative of Abraham because, instead of ascribing to him the current religion of his own age, it credits him with "pureness of religious insight and inward piety" "not inferior to the prophets of the eighth century B.C." He denies the Mosaic authorship of the Pentateuch in like manner, because its dominant ideas belong normally to the stage of national development reached in the fifth century B.C., but were alien to the thought of the fifteenth. This is tantamount to saying that, could it be shown by extraneous evidence that Abraham nevertheless *was* endowed with such precocious piety, and that Moses *did* write the strangely prescient Pentateuch, there would remain no natural way to explain

either phenomenon, and they would have to be reckoned supernatural.

It is not proposed here to raise any issue with the New Criticism either as to its conclusions or the methods by which it has reached them. Let it be admitted for the purposes of this discussion that the Pentateuch was written in the fifth century B.C. Let it be admitted that the prevalence in any document of ideas not current until long after its supposed date requires a corresponding postponement of authorship, or in default of this, an acknowledgment that the document is of supernatural origin. If now it should appear upon comparison that the dominant conceptions of the Pentateuch correspond in fact more nearly with those of the nineteenth century after, than with those of the fifth century before, Christ, it will follow (unless some still newer criticism is prepared again to transfer the authorship, and this time into our own era) that this anticipative wisdom was divine.

Three great realms of research have always engaged the attention of men, viz.: man, life, and the world of force. These have been more distinctly parted and outlined in our time than ever before. But the features that specially characterize modern as compared with ancient thought, and render it unique, are these: 1. That it inevitably takes on a *historic* tinge. It recognizes the present as the fruit of the past, and to be comprehended only by descending to the root and seed. The very names Anthropology, Biology and Cosmology have come to have a bias towards the past, and all speculation gravitates irresistibly toward questions of origin. This tendency is strikingly illustrated in the titles selected for their treatises by prominent authors of the time, *e.g.:* Darwin's "Origin of Species" (Mivart chooses the word "Genesis" instead), Lubbock's "Origin of Civilization," Herbert Spencer's "Genesis of Science," Max Müller's "Origin of Religion," etc. 2. *The comparative* method is especially prominent. The correlation and interaction as well as the correspondence of the phenomena in the various fields of exploration are recognized and reasoned from with an enthusiasm and confidence wholly new. From Owen's masterly work in "Comparative Anatomy" to Spencer's world-wide groupings

in "Comparative Sociology," there is recognized a region embracing many continents indeed, but forming only a single world. 3. There is an instinctive struggle after a *synthetic* result. Having caught the idea of individual progress and that of universal order, it was inevitable that man should seek to marry these two in some comprehensive conception—a conception that might prove a clue to the explanation of that orderly progress in the universe which was dimly seen to be real, but was as yet unaccountable. The most conspicuous result of this struggle is to be found in that Evolution Philosophy which Prof. Youmans (in an address concerning Herbert Spencer, its most illustrious advocate if not its founder) describes as "the newest solution of the oldest problem," "differing in various fundamental respects from any that has ever before been offered to the world"—"truly a philosophy of creation carried as far as the human mind can penetrate." The source and master-key of this whole philosophy, according to the authoritative statement of the same distinguished interpreter of it, is the notion that "life, mind, man, science, art, language, morality, society, government, and institutions are things that have undergone a continuous unfolding and can be explained in no other way than by a theory of growth and derivation." "If by philosophy," he adds, "we understand the deepest examination of things that is possible to the human mind, the principle of *genesis* or evolution certainly answers pre-eminently to this character." Now it is at least a striking circumstance that the title given to the first book of the Pentateuch, as embodying its dominant idea, is also *Genesis:* that is to say, that philosophy at the top of its pyramid of cumulative research in the nineteenth century descries as the true starting-point of history and thought precisely what the lowland dweller who wrote the Pentateuch more than twenty-five centuries before had somehow been lifted to see, and resolves to begin its mental departure exactly where he then began. The parallelism is quite as conspicuous when extended to the whole range of evolution speculation on the one hand and the whole Pentateuch on the other. The successive order of thought in the one, as illustrated by Mr. Spencer in his "Study of Sociology," is (1) Genesis, (2) Environment

(involving the philosophy of migration), (3) Ceremonial Evolution, (4) Political Evolution, (5) Ethical Evolution (which is the gradual emergence into the ethical sphere of the lower laws codified and readjusted). Exactly corresponding to this is the Pentateuchal order, viz.: (1) Genesis, (2) Exodus (the "going out," that is, change of environment), (3) Leviticus (the "book of the priests," or of ceremonial legislation), (4) Numbers (the book of the "census," or of political organization), (5) Deuteronomy (the "second law-giving," that is, the revision of law to meet new conditions). These made up a system the acknowledged unity of which was symbolized in the very name Pentateuch, the "fivefold book," and its completeness in the rabbinical title, "the five-fifths of the law." The same conception is embodied in Mr. Spencer's characterization of his own elaborate and comprehensive system as "the *Synthetic* Philosophy."

But let us turn back from this broad and inviting theme to a more particular study of the book of Genesis alone in the light of the nineteenth century, and especially of the relations of *Genesis and History*.

The rapid advance of the historic to the front rank in the order of studies in our own day is noticeable. Science tends to become historic, and history proper struggles to become scientific. This enthusiasm is born of a totally new apprehension of the range and functions of history—so new indeed that even Gibbon and Robertson when compared with Arnold and Niebuhr are, as Professor Shedd intimates in his lecture on the Philosophy of History, as completely antiquated as Polybius or Diodorus. Isaiah a long time ago represented Jehovah as saying, "As the days of a tree are the days of My people;" but only since Comte have men set about deliberately to work out Isaiah's figure, treating race-history as a growth, and interpreting it in detail by vital analogies.

Paul hinted to the speculative Athenians that a true philosophy of man must take into account the co-operant influence of geographic and historic agencies. Recognizing the radical unity of the human race which has nevertheless become a group of "nations," and the unity of the earth's "countenance" (for that is the word he uses), which has also its separately recog-

nizable features, he intimates that there has been a certain determining power in the "ordered epochs" and "definite localizations" of the life of individual nations, precipitating them toward progress in definite lines. Paul's suggestion little heeded in the first century has in the nineteenth got itself inserted as a corner-stone into the foundations of philosophic inquiry: a stone supposed to be fresh from the scientific quarry. The geographers, the climatographers, and the ethnographers concurrently testify that there is a certain symmetry and significance hitherto unrecognized in the earth's features—that the configuration of continent, sea and mountain chain have influenced the migration and localization of peoples—that local diversities of atmosphere and environment have modified physical feature and temperament and indirectly affected habits of life and thought, and that there is a marked tendency to "ordered stages" of development, through the interaction of which with the other agencies specified, some of the most intricate problems of history bid fair to be rationally interpreted.

Partly as the result of confidence in this new trigonometric method in history, partly as the result of the new and immense fields of vision opened by the uncovering of buried cities and drift relics, the recovery of lost records and lost keys to their interpretation and the discovering of unsuspected affinities in the customs, traditions and languages of widely separated nations, it has come to pass that modern inquiry especially turns toward and grows enthusiastic concerning the periods hitherto counted pre-historic. Precisely where the hither limit of that region was to be established had been some time questioned. Homer did not pretend to be a historian. Herodotus was strongly suspected of having only or chiefly pretended it, and Niebuhr set the crumbling edge of the credible a long distance inside the professedly true even in Roman literature. Within this questionable realm even of the recorded the figures had seemed to sweep by like a spectral caravan enveloped in the dust and their track effaced by the desert wind of doubt that followed them; but beyond was the greater realm of the unrecorded, vast, featureless void. As the palpitating heavens, though empty, draw the steady gaze of man, so did the pre-historic past. As the stars creeping into

the blue vault drew him to deeper vision, to gauging and weighing, and finally to the mental fashioning of a sidereal system, so there came through the emergence of fragmentary facts out of the primeval ages, an inevitable impulse toward the theoretic reconstruction of the outline of that lost era. The task is a Herculean one and as yet necessarily far from completion. It was not to be expected that a single generation, much less a single mind, would wholly solve a problem for the conception of which it has taken so many growing centuries to prepare. It is not material to this inquiry to discuss the soundness of the methods or conclusions thus far agreed upon by the speculative historians, nor even to enumerate them fully. But it is proposed to lay side by side some of the historic conceptions pervading the Book of Genesis, a document admitted even by the most skeptical to be at least two thousand years old, and those pervading current thought which, it is equally admitted, neither have been, nor could have been reached in the natural order until now. The interest of this comparison ought to be greatly enhanced by two considerations, viz.: (1) That the Book of Genesis assumes to cover in the form of authentic narrative precisely that field of primitive anthropology which is under speculative exploration. (2) That it is the only ancient document which does or even pretends to do this, and therefore the only one that fairly solicits such a comparison.

Four dominant ideas are apparent in the book of Genesis, viz.: 1. That of "beginning," making it a book of *origins*. 2. That of "begetting," making it a book of *continuous genealogy*. 3. That of "bringing forth," making it a book of *generations or epochal life histories*. 4. That of "going forth," making it a book of *progress by emergence*. Considering these in their order, note the significance of the fact that Genesis is,

First—A Book of Origins. Among the most striking of its features are its sense of organic relation, and of perspective. Into fifty brief chapters it distils the essence of about three out of the four thousand years of human history before Christ, as reckoned in the current chronology. But it distinctly "looks before and after," recognizing itself as a segment of a larger whole. In its last words it delivers its gathered burden over to the coming Exodus and the

centuries still beyond. In its first it looks back from the edge of the new-formed earth, through forming elemental processes, to formless chaos, beyond which remains only the unbeginning, unsearchable God. Its immediate theme is the preparation of a single household, that of Jacob, for its career. As essential to the apprehension of that career, it sets out to trace the origin of that household, mental and moral as well as physical, and that in the ultimate sense.

It takes within its view, therefore, the whole range of what is now called sociology, neglecting not one of its topics. It recognizes, for instance, the prophetic significance of the great westward migration, tracing it to Abram, the "Hebrew" that is, the man who "passed over" as the great pioneer of a divinely guided movement. It notes a concurrent breaking up of the race into "nations" and "tongues" and finds its origin in the dispersion from the plain of Shinar. It marks the formative power of government whose inception it refers to patriarchy. It emphasizes the distinctive results of the normal and abnormal forms of marriage; a tendency to violence and barbarism being associated with polygamy which began with Lamech, in the line of the nomadic outcast Cain, while monogamy was given of God himself in the unpolluted Paradise. In like manner religious observance, language, divers forms of industry, inventive art, ideas of property, traffic and the divers elements of social order emerge in a distinct and logical series.

But the narrator is not content when he has broadened his view to embrace the whole movement of the race, with its unfolding "works and ways." The household of Jacob is not only a part of that great whole, the human race, but of that still greater complex of things which we call the world. As the fragment cannot be understood apart from the whole, of which it is a fragment, nor the moulded present apart from the past that moulded it, the world and its history must be taken into account in a true record of origins. It is not without significance that Abraham is to get out of Chaldea, and keep out of Egypt if he is to escape mastery by an idolatry-breeding and sensuous environment. The first moral trial gets its force and meaning out of the conditions of a "prepared gar-

den" of Eden. Before man could "have dominion" over the creatures, "subdue" the earth, eat of "the fruit," or be "formed" of the dust, there must have been creatures on earth, fruit, dust; and what these were helped to determine what man should be. The cosmogony with which Genesis begins, therefore, is essentially substructive, inserted in conformity with that modern hypothesis which, as we have seen, Prof. Youmans regards as the "newest solution of the oldest problem," viz.: that "we cannot know the simplest thing that is, without tracing its history through the things that have been to their ultimate origin." This encyclopædism of conception did not fail to arrest the keen eye of Ewald: and being noted in connection with the comprehensiveness, symmetry and completeness of the record that resulted from it, provoked from him in the midst of his passionless criticism a glowing apostrophe to the "lofty spirit" who originated it. It is "the first work known to us," he says, "that seeks to arrange infinitesimal details of origin in one comprehensive genealogy, although such an arrangement is a very obvious one to nations like the Hebrews and Arabs who lay great stress upon purity of blood and family." "It aims," he adds, "to survey the entire mass of historical matter in its greatest extent and trace it back up to the ultimate commencement of all creation."

The legislative element of the Pentateuch, at least in its germinal form, is admitted by the New Critics to be of unquestionably Mosaic origin, and some portions of the narrative to be even older. But assuming as we here do that the book in its present form is the work of Ezra, it will be easily manifest how absolutely inexplicable it is, if reckoned as a natural product of the methods and culture of that age. It was, to be sure, the most splendid era of Greek thought. Ezra, however, was not a Greek but a Jew, and the Jews were proverbially devoid of literary and scientific genius. He lived, moreover, under the Persian *regime*, and that power had neither taste nor toleration for learning in any form. Even in Greece history was only coming to its misshapen birth in Herodotus, whom Lord Macaulay characterized as an "inventor from first to last," a "slovenly witness" even as to the things he knew, and totally devoid of historic breadth, as were all the Greeks, who "admired nobody but themselves." Even of Thu-

cydides, who was the most accomplished as Herodotus was the earliest of the Greek historians, Macaulay remarks that he was eminently "narrow in his generalizations," and that "his most judicious remarks differ from the remarks of a really philosophic historian as a sum cast up by a book-keeper differs from a general expression discovered by an algebraist." The "writer of that age," says Jewett, "had not learned to keep his ideas out of the age he was interpreting." Nor, it might be added, could he even see in any just proportion facts or ideas much beyond his own narrow time and place. In the most splendid age of Latin eloquence Dionysius "wrote much on the art of oratory, yet never mentioned Cicero." In like manner Xenophon, Polybius and the other historians down even to Hume and Gibbon deserve, according to Macaulay, the stinging satire less fairly bestowed by Bishop Watson on the geologists, that they write like a "gnat on an elephant trying from the roughnesses of the hide to lay down its internal structure."

Niebuhr himself insisted that "a correct treatment of history requires the exclusion of all heterogeneous subjects," "the history of the earth and its formations" among the rest. But the advance of criticism since his day has compelled the historian to take account of cosmic as well as purely anthropologic conditions in the solution of his problem. Thus the latest ideal of history has reached exact identity with that of the ancient document we are considering.

But Genesis is also,

Second—a Book of Genealogy. The allusion to the "book of the generations of Adam" in the fifth chapter is the earliest hint we have of that passage of tradition into written permanence which is the prelude to formal history. It is no longer incredible that such a "book" or genealogical register may have existed long anterior to Moses. For the "stunted oblique-eyed" dwellers in Babylon had libraries written in strange arrow-headed characters more than 2,000 years B.C., in a language which had in Moses' day gone through its career and become obsolete; and which scholars agree to call by a name still remaining in the Genesis record—perhaps as transcribed from one of the original registers themselves—that of Accad.

The unmistakable purpose of these genealogies is manifest in the fact that they give names and dates and nothing else. They tell us that A "lived" certain years, "begat" B and "died;" that B thereupon "lived," "begat" C and "died," etc. The names thus naked of incident are manifestly set like posts at definite intervals along the way, to draw the eye through their receding line into a sense of chronological perspective.

The genealogies "do not," as Perowne remarks, "interrupt the order and connection of the book," but are a "most essential part of the structure," and "form, so to speak, the backbone of the whole." Ewald emphasizes the fact that Genesis "attempts very accurate time distinctions and therein betrays a genuine historical spirit, opposed to the method of the Indian Puranas." He insists that in it an "exact and continuous chronology is attempted," and that it is "the basis of all effort at chronology from Julius Africanus and Eusebius; and itself an effort unknown to the most cultivated of the other nations." How deeply imbedded and how sacredly guarded is the idea of historic continuity in this book may be inferred from the impression it made on subsequent history. "The Bible genealogies give an unbroken descent of the house of David from the creation to the time of Christ." Through these in its opening chapters, the whole of the New Testament binds itself upon the whole of the Old, by roots that pierce through all the strata down to Adam and the first chapter. Paul claimed to be a "Hebrew of the Hebrews," and to this day the children of the "stock of Abraham" alone boast or can pretend to boast of an uninvaded purity of ancestral blood.

The thread of continuity in Genesis seems sometimes momentarily to vanish, as when Abel is dead and Cain gone into exile, until it reappears in Seth; it dwindles to a strand in Noah and Abraham, who "pass over" alone bearing the world's future; it threatens to be cut asunder in Isaac, sole "heir of the promise" by Abraham's uplifted knife; but it is never in fact wholly lost. The torch once lit is passed on from hand to hand, never to go out or be independently relit.

Even the life of beasts is to be sedulously transmitted through the flood in an ark specially devised to that end, that the law of continuity may not be ignored.

Here again the old record and the new thinking precisely coincide, for the idea of inviolable continuity is, perhaps above all others, that which the scientific reasoner loves to conjure with. It animates the modern theories of "Conservation of Force" and "Fixity of Law" and "Descent with modifications." There are no doubt fixed and unbroken "grooves of change" along which nature and man must go "ringing down." But that truth, however novel in science and the poetry that voices it, pervades the old Bible throughout, and was plainly enough dominant in the mind of Ezra if not of Moses.

The document in question is,

Third—a Book of Generations. The term "generation," meaning primarily "birth" or "bringing forth," is in Genesis, by a significant but natural expansion, made to take in that bounded life-history which birth holds in itself to be unfolded. It is not confined to individuals, but applied rather to groups of related individuals, or even of phenomena, which are thus mentally isolated into a certain corporate unity. The whole "book" thus falls into a series of "books," and the history into epochs, *e.g.*, the creative, the Edenic, the antediluvian, etc. The flow of historic continuity thus remains unbroken; but across it fall nevertheless lines of partition, wavering it may be, yet discernible like those of Frauenhofer in the spectrum, like those that part the geologic record into "ages," or those which inevitably present themselves and demand recognition as essential to any intelligent or profitable study of the human past. The first of these lines falls precisely at that point where the transition from the title Elohim to Jehovah suggested to Astruc the now famous theory of distinct documents, produced by separate writers and at separate dates. But the verbal change, as well as the seeming overlapping in the record, are at least reasonably explicable as due to the aim at mental unity rather than chronological order in presentation.

There are three accounts of the origin of man belonging to these several epochs, in each of which he is knit into a different group of facts, holds a different position, and is seen from a different point of view.

The creative period unfolds the cosmic order, in which man

appears last but is still included as a constituent. The Edenic covers his localization in a prepared environment, where he is planted in the midst as a creature mentally and morally susceptible. The Adamic or antediluvian takes in the genealogy of Seth—the race that carried a future—and in this man advances to the first place as a progenitor. There is no partitive heading of the first book; for in it as the beginning of beginnings all else lies hid. It outlines the all-conditioning physical order in which God is the creative cause and man the product of power. The second book is entitled "The Generations (or bringings forth) of the Heaven and the Earth." In it emerges an intermediate psychical order in which terrestrial surroundings are the occasioning cause, and man, acted upon and acting, is the subject of influence. The third is "The Book of the Generations of Adam." In it a time and order is disclosed, man becomes a germinant cause, and history begins to unroll.

The deep significance of the term "generations" as applied to its sections, and "Genesis" as the title of the whole book, is not exhausted in the discovery that the idea of cyclic change peculiar to the realm of life, is here applied in the interpretation of history. The analogy goes further. Each cycle through an advancing series, is born out of a preceding cycle and is itself the unfolding of a birth. The term "Israel" is applied alike to Jacob and to the nation, potentially in him. The "covenant people" drew its single thread of life through Abraham out of idolatrous Chaldea, as the new race shut up in Noah had been "born of water" out of a dissolving world. The conception of germinal simplicity and unity flowing through branching channels into diversity and complexity is perceptible throughout. The race has its unitary origin in the "mid-river" cradle of the old world. Thence it parts into three groups to possess the triple continent; the one to abide stagnant or curdle toward the east; the other two to be parted westward by the "mid-sea," one sinking southward to Egypt and the "Dark Continent," the other rising through Europe to the "New World" and the nineteenth century. In Eden also language begins in the crude "names" of things. It breaks up in Shinar into "languages," not through substitution of a new "stock of words," but through dialectic

variation—"confusion of lip"—accompanying local dispersion and the environing changes which at last make it impossible to "frame to pronounce 'Shibboleth.'" The same dialectic processes are still at work—the same connection of "races, countries and tongues" is recognized in tracing diverging forms—and science still starts from the same "corner-post of the world" in tracing the pedigree and distribution of races, languages and institutions. There the traces of the primeval world are most abundant, and the primeval world itself lingers least changed in habit. And there the Sultan still issues tri-lingual proclamations to Semitic, Hamitic and Japhetic subjects.

Questions of fact, however, are not here in discussion, but that of method as disclosing underlying ideas. The idea of progress is visible enough; for the record that begins in chaos ends at the death-bed of Joseph in a palace, a developed character, and a hopeful onlook. This idea of progress, Sir Henry Maine assures us, is a purely modern one, even to this day wholly alien from Oriental thought. But still more modern, if possible, is the recognition of the truth, which, as before intimated, so colors the book of Genesis as to have suggested its name, that there can be no progress in the higher sense—no emergence of a new era or new thing—except through birth. There is actual continuity in the unfolding of the thing that is—there is abstract continuity in the unfolding of a series of things—but the thing that is to be cannot begin to be in its individuality except through breach of continuity. The very newness of the new depends on its transition from the old.

No theorist of to-day assumes to explain the appearance of any eccentric life-form without the intervention of birth. Nor does any philosophic historian ignore the function of great crises in lifting the world to new planes of life and thought. "The fire in London was a blessing," says Lord Macaulay. "It burned down the city but it burned out the plague." The irruption of the northern tribes in like manner saved the Western Empire from stagnation and decay, although "it cost Europe a thousand years of barbarism to escape the fate of China." In all realms revolution seems to be an essential factor in evolution. The earth gets onward in its steadfast flight through turning on its

axis and returning in its orbit. The even flow of the arterial circuit is measured by heart-throbs; in each of which life itself is surrendered and begun anew. As the antediluvian world resigned its garnered life to Noah, as the hope of Israel went with the infant Moses into the treacherous bulrushes, as Hercules in the legend carried the strength of his generation adrift in an earthen shell, so every age when it has filled its appointed limit, has left its ripened life hidden in a "seed." The world has had no Benjamin, "Son of the right hand," that was not first a Benoni, "Son of Sorrow," born at cost of a life.

In the "dividing" of the Creative record by the growth and decline of "morning" and "evening" into rounded "days," and of the subsequent Genesis history into analogous "books," while maintaining an unbroken continuity and advancing order in the whole, there is an unquestionable anticipation of the characteristic modern notions of "differentiation," "involution and evolution," and "progress through cyclic change."

It remains to consider, as bearing on its relation to history, only the fact that Genesis is,

Fourth—a Book of Progress by Emergence. The sense of movement in the record is instantly conspicuous. Facts mentioned recede at once into the background, not because they are insignificant but because they are preliminary. World-ages thus hang in drops from the writer's pen, and fall in utterances so sententious as to win from Longinus the epithet "sublime," from Augustine wondering commendation of Moses' "wise reserve," and to provoke from Carlyle the characteristic remark that in our day "the destruction of a Brunswick theatre takes up above a million times as much telling as the creation of a world."

The story that hastens through the history of creation in a single chapter, lingers through three in the life of Adam, widens to six in that of Noah, swells to fourteen in that of Abraham, and pours its flood soon after into the extended history of Israel.

But progress is secured not by departure simply but by departure from a right point. All the facts mentioned do not become even a background. There is a narrowing selective process. "The heaven and the earth" at first appear, but the

earth alone is taken as the subject of the story. Chaos then passes, darkness falls apart, the blue vault lifts, the waters shrink, and light, air, and solid land emerge. So also the myriads of swarming life in its lower forms recede that man may stand single and conspicuous in the foreground. Forthwith his history cleaves apart from that of the "ground from which he was taken," through the inspiration of the breath of God; and the lower creatures are equally shut out as furnishing no "help meet for him." The process of elimination goes steadily on in the strictly human history. Cain "went out" and reappeared no more. His stock, like that of Ishmael and Esau afterward, is soon dismissed from the record as "aborted." The animalized antediluvians who were "flesh," were blotted out, and the idolatrous Chaldeans were left out of history, while Noah and Abraham alone were "selected" as "fitted" to "survive." The same rigid discrimination is exercised in fixing the range of history. The narrator goes on his chosen way avoiding much. He does not ignore, but neither does he dwell upon the growth of music, handicraft, or the beginnings of social and civic institutions. He is not insensible to the overhanging shadow of the massive Assyrian or Egyptian civilizations. But they do not awe or divert his thought. He leaves Nimrod's tower unfinished and Pharaoh's palace without an heir, while he pushes on to a shepherd's tent to detect in Judah and the Messianic promise the true thread of coming history. It was a marvellous prescience. For the tribe of Judah alone survives in an unbroken lineage from that earlier world and all history to-day counts backward and forward from the date when that Messianic promise was fulfilled.

This critical sagacity which reduces history from a loose and plethoric wonder-tale to a terse and symmetrical statement of pertinent facts is of slow growth and comes late in the natural order. "As a rule," says Macaulay, "history begins in novel and ends in essay." In the one case it aims to entertain, in the other to support a theory; in neither to make fidelity to fact supreme. Even to this day the world is so beset with garrulous and unstratified talk that Carlyle longs for some "intrepid Dr. Wagtail that will reduce all these paper mountains into tinder and

extract therefrom the three drops of Tinder-water Elixir"—in whose hands the "whole printed history of the world from the creation downward" may, as in those of Bossuet or Müller, "grow shorter than that of the Ward of Portsoken for one solar day."

History had reached no such stage in Ezra's day. Even in Greece the people were listening in the market-place to the chanting of Homeric ballads, the recounting of Herodotean marvels, the Socratic way-side colloquy out of which were yet to grow history, science and philosophy. Slowly the volubility of oral utterance shrunk into written conciseness; words began to be shorn of vague, penumbral meaning by rigorous definition; the margin of the credible was cut back by vigilant questioning; and so went on a sifting process through which has emerged that body of formulated method and opinion which the world cherishes to-day, and which is not yet complete. And what are the "three drops of Tinder-water Elixir" which these twenty-five subsequent centuries have distilled by way of conclusion out of its heaped up "paper mountains" of inquiry? Substantially these: that true history must go back to the origin of things; that it must take account of changing conditions of place and time; that it must single out for record only such circumstances as are determining factors in the story, such for instance as the introduction of speech, of the idea of good and evil, of marriage, of tools, habitations and new forms of industry, of social and civic institutions, etc., etc. Now these are precisely the canons observed, and these and such as these the circumstances seized upon and written down in the Genesis record in the gray dawn of the world.

With the utmost directness and in smaller compass than that of the briefest of the articles that to-day stigmatize it as an "old Hebrew legend," this venerable book notes and answers the whole round of questions which modern thought agrees to reckon as involving the fundamental data of history, and to the solution of which in detail successive volumes are still being given. In the form given to the facts, from the description of the earth as emerging out of chaos to that of Israel about to emerge out of Egypt, and from the rejection of Cain's progeny to the dismissal of the Oriental Civilizations with incidental

allusion, there is always deliberate and intelligent rejection of that which has become obstructive or indifferent—that is to say, a recognition of the eminently modern notion of progress as dependent on the elimination of the unfit.

Putting together these structural ideas of the book of Genesis, it is impossible not to recognize the suggestion of a detailed analogy between the growth of the social and individual organism. Life in the individual also appears to get on through excretion of the inappropriate and superfluous; it has its cyclic career, it is linked into an unbroken series, and it looks back to a definite origin in birth, in which all its successive phenomena lay folded. The classificatory hints that lie in the facts of the record make this intended analogy more unequivocal. Notice the prominence given to (1) *Types of character.* Adam, Enoch, Noah, and others are thrown up above the level of their times into unique prominence, each remembered by peculiar circumstances disclosing a peculiar trait in him. Enoch was the first partner of the unseen, Noah the first heir of the future; Abram set forth the outward heroism of aggressive faith, Isaac the inward heroism of submissive faith; Jacob was crafty through rich mental endowment, Joseph was wise through a balanced moral nature. It is a long stride from the childlike simplicity of Adam in the garden, whose code is a single precept and whose world of possible temptation was shut up in a single fruit of a single tree, to the dextrous wisdom of Joseph threading the tangled growth of political, social, and intellectual problems that had sprung up in the rank civilization of Egypt. The transition of emphasis from sphere to sphere in the line of advance is also conspicuous. Abram was a man of action, but the succession passed not to Ishmael, a bold adventurer like him, but to Isaac, the timid and contemplative. The hairy Esau was a man of brawn, but Jacob outmatched him with a more perfect brain. Finally the heart is exalted above the head. For while the shrewdness of Jacob could not keep or deliver him out the pits he had himself digged for others, the ingenuous integrity of Joseph lifted him out of the pit where others had thrust him innocent and led him safely along a dizzy precipice to a seat beside the throne.

Notice again (2) *The tribal groupings.* There come into view in the course of the history clearly defined and permanent lines of demarcation. These are primarily genealogical: the people gather apart "after their families," fatherly supremacy being the nucleus of organization. But they are islanded apart also by their "tongues" and their "countries." For local separation as well as divergence of dialect and custom are co-operating factors. The families of Abraham and Lot were sundered because the land could not "bear" them both, and further estranged by Lot's entering a city life. Abraham found himself a stranger in Egypt not only because of alien speech, but because a shepherd's ways had come to be an abomination to a settled agricultural people. Thus co-operating circumstances deepened and broadened the tribal chasm and "nations" took pronounced and permanent outline.

Yet again there is conspicuous (3) *The Solidarity of the race.* However debased or estranged they may have become, it is never left in doubt that all the nations are of one blood. The branches diverge, wither, or are cut away, but the trunk is one. Eve is so called because she is the "mother of all living." Eve sprang from the side of Adam, but he sprang from no living form. The race is isolated from the lower groups by the inflow of the breath of God, by permanently upright form and articulate speech and by subjection to a moral economy; and thus it stands apart, one and superior.

There remains yet to notice one more and still wider criterion of classification recognized in the record, viz.: (4) *The isolation of the living from the not-living by the phenomenon of birth.* It is uniformly affirmed of living things that they were "brought forth," and it is affirmed of nothing else. The universe, light, the continents and the sun had their "beginning" as truly as herb, tree, fish, fowl and cattle, but they were not "born" like all these last. The vegetable, the marine and the higher animal world are indeed thrown into separate groups by intervening days and diverse spheres of origin, but they with man become one living world through an unfailing birth-mark.

Now compare with these the classificatory clues which modern science has discovered in her researches into nature.

She recognizes (1) *Representative types;* determined by morphological character. These ascend in grade from the simplicity of the jelly-blob to the myriad-fold complexity of the high-brained vertebrate—seeming retrogression in form being often really transition in function to a higher sphere. (2) *Species;* determined primarily by genetic relation, but modified or intensified by environing circumstance. (3) *Races;* a term taking in a range of common feature larger than the preceding though not so well defined. In the case of man the criteria are fixed by Haeckel as "upright posture" and "articulate speech." (4) *The Biologic realm;* including in one the whole range of living things, animal and vegetable. The displacing of the old partitive terms "botany" and "zoology" by the new and inclusive one "biology" is here especially noticeable. For it emphasizes the fact that life itself binds its subjects into a world apart. The "living" are parted from the "not-living," according to Prof. Huxley, by a chasm as yet impassable.

So then by the old road and the new alike we come again to biology as the vestibule of history, and to biology genesis is recognized on both sides as the talismanic clue. But the coincidence reaches still further. The phenomena of descent are now fairly classified under three heads, viz.: (1) *Heredity;* covering the genealogical transmissibility of identical physical, and in a less degree, of mental and moral traits. (2) *Variation;* referring to the tendency to occasional departure from the fixity of heredity in unanticipated directions. (3) *Modifiability;* the obscure yet unmistakable susceptibility of birth-processes to the influence of exterior causes, purposed or accidental.

All these are distinctly emphasized by the pre-scientific Ezra (still supposing it to have been Ezra, and not Moses, whose work we are studying). For (1) the fruit-tree yields "fruit after his kind whose seed is in itself," and Adam's son is "in his own likeness after his image." The significance and sacredness of hereditary law as influencing character is hinted in Abraham's jealousy of the intrusion of Canaanitish blood in intermarriage—a jealousy so deep that all the centuries have not worn it away from his posterity. The unnatural alliance of the "sons of God" with the "daughters of men" produced "monsters." The wild Ishmael was the fruit of

Abraham's abnormal union with an Egyptian slave, while Isaac was born of the "free woman." The well-bred Joseph was the son of Jacob's riper years, and of his true marriage with Rachel, the outcome of a lawful love. But on the other hand (2) Cain and Abel were the fruit of a common father and mother—one in origin, but without explained cause directly opposite in character. The three sons of Noah led three divergent races each to a separate continent, character and destiny. (3) Darwin himself could scarcely have devised a more scientifically complete experiment on the "variation of animals under domestication" than that which Jacob conducted among the flocks of Laban. The setting of the "pillar rods" in the "watering troughs," and that by selection before the stronger cattle and at "breeding time," shows, if anything could show, an acquaintance with the modifiability of life-processes through the intelligent use of exterior agencies.

As a result of the discussion hitherto, it may now be confidently assumed that the title "Genesis" fitly characterizes the book as pervaded by the dominant idea of birth as the clue to life and life as the clue to history. And this is precisely the "burning" word which Auguste Comte, the real prophet of the new scientific dispensation, threw into modern speculation. It is somewhat the fashion among recent writers to decry Comte's speculations, in the spirit of Prof. Huxley's sarcastic characterization of them, as proposing "Catholicism *minus* Christianity." Even those who have borrowed most from him acknowledge their indebtedness only by a Parthian shot. Notwithstanding reiterated protests of dissent and of revolt against the absurdities of Comte, it is probable that if all the guns abstracted from his arsenal were sought out and silenced, the batteries of later Evolutionism would be found to have dropped their heaven-filling reverberations to a puny rattle. His scheme of social and religious despotism was to be sure grotesque and repulsive enough. But this ought not, because it first presents itself, to be allowed to barricade the way to a deeper inquiry and more generous judgment of his studies which will also be more just. It ought not to be forgotten that he thought amid the social and religious anarchy of the French Revolution, and that his practical suggestions were a not unamiable even if a somewhat frantic effort after a solution

of its terrific problems. But there was a soberer and profounder thought born of the same "red-fool fury of the Seine."

Order had been coupled in men's minds with changelessness, and progress reckoned as a breach of order. They had not conceived of progress as itself involving order. This blindness was to be remedied by transferring the basis of speculation from the fixed mechanical to the flexible vital world. "For the ancients," he said, "astronomy was the most important of sciences." "In modern times biology holds the first rank." The interpretation of the universe from "biology," as contrasted with that from "cosmology," is the "first secret of Positivism." He proposed, therefore, instead of the "animal, vegetable and mineral" kingdoms formerly recognized, to substitute the "organic and inorganic" (*i.e.*, biology and physics). *Omne vivum ex vivo*—this is the characteristic axiom of biology in his esteem. "A crystal," he says, "is not born of another." "The property of birth is not less special to living beings than that of death. Here there is a new guarantee for biology against cosmological encroachment." He rejects the notion of instability of species as dangerous to the independence of biology, trammelling it with cosmology. He brings his lines of analogic reasoning back to birth, and there, with the writer of Genesis, he loses them—recognizing an end of scientific exploration. And in this he is consistent and strong, while his successors, who have gone on to attempt the solution of the insoluble, have become inconsistent and weak. For birth, which by universal consent explains so many mysteries, remains and bids fair to remain itself a mystery unexplained. It is vain to speak of it, with Prof. Tyndall, as involving only a "purely mechanical problem" like the "formation of a crystal," while it outrages the fundamental principles of mechanics and no mechanical solution of it is even conceivable. It is unscientific to define a germ, with Prof. Huxley, as "matter potentially alive and having within itself the tendency to assume definite living form." For science deals in the actual—that which is, not that which is to be or may be: no scalpel ever cut or microscope detected a "potency" or a "tendency." Nor can any logical continuity be established between the mechanical oscillation of an atom quantitatively expanded, as Herbert

Spencer proposes, in however many directions and however far, and the wholly new and unique range of phenomena unfolding out of birth. The abiologic world has no hereditary lines, no individuation, no cyclic changes, no self-adjusting flexibilities. Continuity rules in cosmology, but breach of continuity is of the essence of birth. Crystalline growth is fixed and geometric, but the first token of life is unreportable eccentricity of changing outline.

Clearly the intrusion of cosmologic ideas into the superior realm of biology is, as Comte saw, illicit and confusing. It is interpreting life by death. It is allowing the "mould" to creep "above the rose."

If it be true, as he insisted, that the transition to the biologic standpoint of interpretation was a step forward, and if it has created the new enthusiasm and confidence that pervade the study of history and philosophy, as well as of biology itself (as he predicted), it is well to be jealous, as he was, against an unconscious retrogressive step to the abandoned sphere of mechanical law.

For the kingdom of law is not a sterile unity: it is fruitful and complex. There is a "law of death," despotic, changeless, blossomless; there is also a "law of the spirit of life," elastic, free, exuberant; and the gateway out of the first in nature is "birth," as it is a "new birth" in grace. Backward from the outer porches, in our reverent research after origins, we are led jointly by the hand of the modern thinker on the one side and that of the ancient revealer on the other to that sacred veil behind which the forms of life are plastic to an unseen hand, and its fluent possibilities to an unknown will. There they and we must pause. If we ask the secret of unfolding history, all voices point to Genesis: if we ask the secret of Genesis, our only answer is,

"Behind the veil, behind the veil."

A HALF-HOUR WITH THE EVOLUTIONISTS.

[A Paper read before the American Institute of Christian Philosophy, March 5th, 1885.]

By Abraham Coles, M.D., LL.D., Newark, N. J.

SHOULD you ask me, Do you believe in Evolution? my reply would be, most certainly I believe in it, if by Evolution you mean the Evolution of Growth, which is Evolution properly speaking. Of this we have endless proof and exemplification everywhere. From the quickened seed we see evolved first the blade, then the ear, then the full corn in the ear. The oak is evolved from the acorn, the chick from the egg. That which is *in*volved is *e*volved, for true evolution always presupposes involution. If the egg furnishes the chick, it is because the chick was contained in the egg. All development is limited to what is potentially present in the germ. It is an unfolding of what is there hidden. Just that and no more. This bounds its "promise and potency" absolutely, and there is nothing beyond. An arrest of development yields an imperfect chick half-formed and non-viable, not another animal. Everything is true to its kind. Like begets like. Oyster begets oyster. Man begets man. After birth there is in him a further development. The infant faculties burgeon and expand and the final outcome is, it may be, a Shakespeare, a Milton, a Newton. Evolution in this sense is a familiar fact, and something we all believe in.

Then there is an Evolution of another kind—the Evolution taught by Agassiz—the Evolution of a Divine Plan, exemplified in the related succession of animals terminating in man, which is consistent and credible, and commands our assent. For instance, it is easy to trace in all vertebrated animals (that is, animals with a skull and backbone) what is called a homology or agreement of structure. Thus the arm of a man, the foreleg of a horse, the wing of a bird and the fin of a fish are homologous—the par-

ticular form of these organs being due to modifications of one type of structure. They evidently all point to one plan in various stages of development. In the lower order of animals, in the fish for example, the correspondence is less obvious, but, as you ascend, the rudimentary forms assume greater and greater completeness, until, at last, bone answers to bone, muscle to muscle, viscus to viscus, as seen in the higher mammals and archetypal man. Observe that the Evolution here spoken of is in no wise generative. One order does not spring out of another. The fish does not beget the reptile, the reptile the bird, the bird the mammal, for this is impossible. There is no proof that such a thing ever did or ever can occur. It is contrary to the course of nature, and were it to happen, it would be the miracle of miracles.

No such objection lies against the kind of Evolution here meant, which solely respects the Divine idea or purpose in process of fulfilment. It is a sublime conception, and is, moreover, in perfect harmony with all that we know. Concerning it, Science and Scripture are in beautiful accord. Let us listen while the first speaks by the mouth of the great Agassiz: "The aim of the Creator in forming the earth, in allowing it to undergo the successive changes which geology has pointed out, and in creating successively all the different types of animals which have passed away, was to introduce man upon the globe. Man is the end to which all the animal creation has tended from the creation to the first paleozoic fishes." Professor Owen says: "A purposive route of development and change, of correlation and interdependence, manifesting intelligent will, is as determinable in the succession of races as in the development and organization of the individual. Generations do not vary accidentally in any way and in every direction, but in preordained, definite, correlated courses."

The words of Inspiration are to the same effect, and anticipate the conclusions, we had almost said, the very language of these two witnesses, the most eminent among modern Scientists. The Psalmist says: "My substance was not hid from Thee when I was made in secret, and curiously wrought in the lowest parts [strata] of the earth. Thine eyes did see my substance, yet

being imperfect, and in Thy book [book of nature whose leaves are the stratified rocks] all my members were written, which in continuance were fashioned when as yet there was none of them." To accommodate other Scripture, used properly in a spiritual sense, but equally true in this, "Whom He did foreknow, He also did predestinate to be conformed to the image of His Son." Accordingly in the fulness of time, God said: "Let us make man in our image, after our likeness, and let him have dominion." Last made, he was first planned. Foreordained from the beginning as the ideal exemplar and archetype of all animals countless ages before he appeared, he was prefigured and predicted in a long series of "geologic prophecies." Creation culminates in him. He is the apex of the pyramid. He dominates the Cosmos. He reigns by divine right. God is his Father, not a cold abstraction. In Him he lives and moves and has his being. Sin has not disrupted the tie. For his redemption the Lamb was slain from the foundation of the world. All was foreseen and provided for. Hugh Miller remarks: "The advent of man simply as such, was the great event prefigured during the old geologic ages. The advent of the Divine Man, who has abolished death and brought life and immortality to light, was the great event prefigured by the historic ages." It is reasonable that He, who foresaw the end from the beginning, should have a purpose, and that all that has been, and is, and shall be, should be the evolution of that purpose. As growing out of "the determinate counsel and foreknowledge of God," originating and directing all things with infinite forecast of intelligence from first to last, this kind of Evolution might, not inaptly, we think, by way of distinction, be denominated Predestinationism. One object in the use of this term would be to emphasize the difference between it, and that blind naturalistic fatalism which characterizes the evolutionary teachings of Darwin, Huxley, Tyndall, Spencer, Haeckel and others.

We have said that we believe in the Evolution of Growth, and in the Evolution of a Divine Plan. Evolution in both these senses is indisputable. The gradual unfolding of a preordained scheme of creation is loudly announced and authenticated. We can hear, by the slightest effort of attention, the resounding footsteps of the Eternal in His long march down the ages.

"There are diversities of operations, but the same God who worketh all in all." This is the one adequate explanation of all homologies. It accounts for all the facts without any hypothesis; and so gives us a supreme advantage over those, who conjecturally and gratuitously maintain, not only in the absence of all proof, but in defiance of all the facts of the case so far as known—that all organic diversities are deducible from a unit of life—that all the differences we see are but the result of endless transformations, brought about by the inevitable action of unintelligent forces, the unassisted workings of all-sufficing nature.

According to this view, every thing is fatalistic or fortuitous, or, at any rate, outside of God. If asked if I believe in Evolution in this sense, my answer would be, certainly not! God forbid. To me, if I should accept it, there would happen, what the brilliant Professor Clifford of Cambridge, England, pathetically confesses happened to him following his acceptance. "We have seen," he said, "the spring sun shine out of an empty heaven to light up a soulless earth: we have felt with utter loneliness that the Great Companion is dead." The doctrine, I confess, shocks and revolts me; but it is not on sentimental grounds alone, or chiefly, that I discredit it and abhor it. I regard it, and have a right to regard it, as a pure invention, unsustained by any proof worthy of being called scientific.

I know it is said, that the full acceptance of the doctrine of Evolution in any of its phases, even the most extreme, is perfectly compatible with a hearty retention of the most orthodox forms of Christian belief; and that the fatality which befel the accomplished Professor was unfortunate, but not logically necessary; or, even if it were, we are charitably advised that, in the pursuit of truth, we are bound to be serenely indifferent to consequences. It may well be doubted, however, whether any one can be so sure of his logic as to justify him in any such indifference. That the necessities of naturalistic ratiocination do not compel all minds to move in the same direction, or conduct to the same goal may be conceded. Darwin, it seems, does not, or did not at one time, deny the possibility of a Creator who originally breathed life into a few forms, or only one. Huxley's and Tyndall's admissions may, or may not, go so far. Haeckel,

the German Darwinist, thinks Darwin conceded too much in conceding a possible Creator of life, and more in fact than he meant to concede; but Spencer, by infinite repetitions, precludes all doubt as to his belief in, at least, an unknowable It. The faith expressed by these chief representatives of Evolution is evidently, if faith at all, faith at its minimum, even in Darwin. Between his God of half an eternity ago—who just woke long enough to breathe life into a few material forms or only one, and then fell once more into a slumber so deep that it has not been broken since—and the no-God of Haeckel, and the mysterious It of Spencer, there would really seem to be not much to choose. An infinite Creator, acting ordinarily through secondary causes, Himself the moving principle of the universe He first framed, is, we suppose, a true conception, but this is not, logically and necessarily not, the Creator of the Evolutionists. According to them the universe is essentially automatic and Godless. For infinite years the Darwin Divinity has given no sign of His existence, is practically non-existent, has ceased to be contemporary, if not dead is as good as dead. "The Great Companion" is not, and we are left alone.

I am not ignorant of the fact, that there are some optimistic Christian apologists, who contemplate with great philosophical calmness the controversy going on, and are bravely confident, that if it should turn out in the end that the evolutionists are right and we are wrong, we have still nothing to fear. Now candor is a good and beautiful thing, but it can be carried too far, and surely to admit that the error we are combating may nevertheless be the truth, only prematurely announced, is to make a fatal concession. In that case it would seem to be clearly our duty to wait and see, and in the meantime hold our peace. But this we contend is false candor. We have no occasion to wait. All the necessary proof is in. My relation, and the relation of all men to the universe and its Author is unchangeably settled. No new discoveries can affect it. "God has not left Himself without a witness." "For the invisible things of Him from the creation of the world are clearly seen, being understood by the things that are made, even His eternal power and Godhead."

The Evolution, which these modern theorists affirm, and

which we combat, is not simply a question of *variability* of species. It is admitted that the possible range of this is not absolutely fixed; all we know is that it is comparatively narrow. What new phase Evolution may take on in the future does not now concern us. It may be one entirely unobjectionable. At present our business is with that proud and pestilent form of Evolution, so-called, which "exalting itself against all that is called God and worshipped," just now deafens us with its urgent assumptions, and infidel pretentions, and revolutionary frenzies —stopping short of no extreme, madly striking at the awful foundations of morality and religion—then undertaking, legislatively, and with incredible presumption (the old code having been superseded and set aside) to extemporize some new fantastic "Data of Ethics" to fill the void. Mistaken men! how can ye be so cruel? Emptied of God what would the universe be worth? Truly, could one insanely imagine that his Divine Father was not; and that in the vacant heavens, there were to him forevermore no eye to see, and no ear to hear, and no hand to help, what a piteous wail would necessarily go up! and how surely would his sick and smitten heart shrivel up and wither under the freezing sense of its forlorn and desolate orphanage!

Evolution, genetic Evolution, derivative Evolution, which is the kind under consideration, consistently rejects the theory of a personal Creator. The Encyclopædia Britannica, ninth edition, just issued, in its article on Evolution remarks: "The doctrine of Evolution is directly antagonistic to that of creation. Just as the biological doctrine of the transmutations of species is opposed to that of special creations, so the idea of Evolution as applied to the formation of the world as a whole, is opposed to that of a direct creative volition. It substitutes within the ground which it covers, the idea of a natural and necessary process for that of an arbitrary volitional process." This impartial testimony leaves no doubt as to the real nature of the question at issue. No attempt is made to conceal the fact that Evolution is infidelity of the most pronounced type. It is natural (in view of the tremendous interests at stake, comprehending all that is most dear to man, and in view of the number and character of those who scruple not to avow their belief in the doctrine) that

the gravest solicitude should be awakened. One wonders how it has happened. Surely the evidence must be imposing beyond measure to deceive so many accomplished minds. By no means. Let any one take the trouble to examine, and, if he is at all like myself, instead of being impressed with its strength, he will be surprised at its weakness. Let us hear what facts one of its ablest advocates has to offer in the field of biology in its favor.

In the fall of 1876, Professor Huxley came to this country, and delivered three Lectures on Evolution. I went to hear him; and it was, I confess, with no little surprise, that I listened to the declaration made by him at the close of his third and concluding Lecture, that "the doctrine of Evolution rests upon exactly as secure a foundation as the Copernican theory of the motions of the heavenly bodies." He had said in his second Lecture: "Undoubtedly, if the doctrine of Evolution be true, it follows that animals and plants, however diverse they may be, must all have been connected by gradational forms, so that from the highest animals, whatever they may be, down to the lowest speck of gelatinous matter in which life can be manifested, there must be a sure and progressive body of evidence—a series of gradations making it easy and practicable to pass from one end of the series to the other." He speaks of this as "a necessary postulate." The Evolution here meant is of course genetic or derivative evolution—not the Evolution of Agassiz.

Did Mr. Huxley meet, or even so much as attempt to meet, the self-stated requirements of his theory? Were all gaps filled up? Did he bridge all chasms? Did he show how invertebrates became vertebrates, or crack any other of the hard nuts which had tried the teeth of his predecessors? Was he able to supply all the wanting links we will not say between the mollusk and man, but the monkey and man. Between the last Tyndall has said, "there yawns an immense gap which it is impossible to bridge." Was he successful in achieving the impossible? If not, if he did none of these things, what right had he to so far discredit the intelligence of his hearers as to say of his so-called proof, "If this is not scientific proof, there are no inductive conclusions which can be said to be scientific." When he ventured on so remarkable an utterance, one could

not help wondering what had become of that caution or that candor, which led him to admit in a previous Lecture, that it was true of numerous organisms, hardly distinguishable from extant species, that they had maintained their essential identity, without modification or change of form, from the earliest geologic times, and that so far as they were concerned, there was no progression, no evolution, showing, he acknowledged and asserted, that "there is no intrinsic necessity on the part of animal forms which have come into existence, to undergo modifications." "Furthermore," he went on to say, "it is perfectly clear, that if our existing paleontological collections exhaust the whole series of events which have ever taken place upon the globe, such a fact as this [referring to the absence of all trace whatever of lizards or true reptiles in the whole mass of formations before the Permian] directly contravenes the whole theory of evolution, because that postulates, that the existence of every form must have been preceded by some other form comparatively little different from it." To neutralize so important an admission he was obliged to make appeal to the admitted imperfection of the geologic record, gratuitously assuming, however, that a record less imperfect would redound to the advantage of evolution; whereas, it might very easily turn out to be just the contrary. At any rate, it was hardly allowable, we thought, to set off against good positive evidence, that which is no evidence at all—the possible evidence of an absent witness.

It is certain, and the fact is not denied, that in the actual state of things, there is no example of the transmutation of species. Mr. Huxley himself in his chapter on the "Origin of Species" tells us: "After much consideration, and assuredly with no bias against Mr. Darwin's views, it is our clear conviction, that, as the evidence stands, it is not absolutely proven, that a group of animals, having all the characters exhibited by species in Nature, has ever been originated by selection, whether artificial or natural." Again, he says, "There is no positive evidence, at present, that any group of animals has by variation and selective breeding given rise to another group which was, even in the least degree, *infertile* with the first. Mr. Darwin is perfectly aware of this weak point, and brings forward a multi-

tude of ingenious and important arguments to diminish the force of this objection, but still, as the case stands, this 'little rift within the lute' is not to be disguised or overlooked." Let us pause here for a moment. Prof. Huxley expressly admits the insufficiency of Mr. Darwin's proof; and yet Haeckel does not hesitate to affirm that the theory, which maintains that all species of animals and plants are derived from one single or a few original forms, and have developed themselves in the natural course of change, "has received through Darwin its *complete demonstration* and causal foundation." It is only one of many illustrations of the looseness with which the terms "demonstration" and "proof" are used by evolutionists.

Mr. Huxley, having devoted nearly the whole of his second Lecture to trying to make plausible the Evolution of the bird from the reptile, admitted at the opening of the third and last that the evidence he had produced fell short of demonstration; and it was weakened, moreover, by the fact that the intermediate forms occur promiscuously in the same formations, instead of successive ones. Consequently the lecturer was driven to rest the fate of his whole argument upon the evidence derived from the fossil horse.

The modern horse (which did not exist in America when it was discovered by Columbus), anatomists tell us, walks on one toe,-the single hoof, answering to and being the homologue of the nail of the middle finger or toe in man, the three bones below the fetlock (*i. e.*, the upper and lower pasterns and the coffin-bone) forming the phalanges. The shank or cannon-bone, to which these are joined above, corresponds to one of the metacarpal or metatarsal bones of which there are four in man. In the horse, besides the shank, there are two smaller bones called splint bones, situated on either side a little behind the other. In the ox and deer these are prolonged into hooflets or toes, but do not touch the ground. In the Far West, there have been found, it seems, embedded in the Tertiary at different depths, the fossil remains of animals assumed to be of a horse-like structure, but resembling, Mr. Huxley admits, the horse only in the broad features of their organization. In one of these, the *Hipparion*, the splint bones are represented by real hooflets, as in the ox

and deer. In the *Anchitherium*, an animal no larger than a sheep, these functionless hooflets appear as fully developed hoofs. The *Orohippus*, an animal the size of a fox, was still more liberally supplied; having four hoofs or toes before, and three behind, upon which to walk. Clearly, to make these facts and findings available to his argument, it devolved upon Mr. Huxley to prove the existence of a parental connection between these several animals, not simply homological relationship. If two animals, so much alike as the horse and the ass, give rise to a hybrid that is invincibly sterile, it is hardly safe to assume, one would think, that the four-toed *Orohippus* could and did produce the three-toed *Anchitherium;* and this the deer-footed *Hipparion*, and this last the existing *Solidunculate* or modern horse. But safe or not Mr. Huxley was equal to it. Undeterred by the greatness of the intervals so different from that insensible gradation which he himself had led us to believe was a prime necessity of the Evolution hypothesis—he did not hesitate, showing that the most daring feats of the boldest of acrobats can be easily outdone by the dizzy leaps of evolution-logic grown desperate. Remember this was his last card. He admitted in every other case there had been some lamentable lack, some necessary link wanting. But here, he said, the proof was sufficient, and he staked everything upon it. The problem was thus made very simple. Is Evolution proven and true? It is not proven and true, Mr. Huxley says, if the ancestry of the horse be otherwise than that given above. We are content. Let the case go to the jury, and let common sense decide. No twelve men we are sure would be willing to hang a dog on no better evidence.

As the burden of proof in all cases rests upon the party affirming, Evolution falls to the ground by its own weight unless the affirmation is made good. To be unproved is the same as to be disproved. In the name of science, therefore, we have the right to say that Evolution, *genetic* Evolution is a failure, complete and absolute. It is at war with facts. Experience refutes it. Even as a hypothesis it stands condemned. Hybridism gives it the lie. It breaks down at the first trial. The first step conducts to a dead wall or a closed door which the Darwinian key ought to open, but does not; so we are sure, so sure that

the testimony of a thousand locksmiths could not make us surer, it is not the right one. *The right key is the key that unlocks.*

But may not the undeniable gaps in our scientific knowledge be filled up with extra-scientific speculation? This we know has been attempted, but it would seem to be not a very creditable shift, for thereby it loses its scientific status. To be obliged to go outside of science what better is it than a confession of discomfiture? Spencer would seem to have a special fondness for this extra-scientific work—is content to philosophize, makes light of defective proof, leaves facts to plodders, and has no difficulty in evolving evolution out of his inner consciousness. But of this hereafter.

It is natural and right, we hold, that believers in the Bible should wish to make their science to square with the Book or the Book with their science. Mr. Huxley's sneer at the flexibility of the Sacred Record had better have been withheld, for he ought to have known that this very quality which he stigmatizes constitutes a capital and crowning proof of its superhuman origin and authorship. We have no fears that science will ever make the first chapter of Genesis obsolete or supersede its teachings. That it may help to explain them better even than philology is possible and credible. The bigotry of belief is no worse than the bigotry of denial. But we admit all bigotry is bad. Bibliolatry, a fanatical regard for a book, is freely ascribed to the opposers of Evolution, as if this were the secret of all opposition to the doctrine. But it will hardly be claimed that Agassiz was overswayed by any such prejudice. Among his latest utterances is the following: "We find," he says, "endless discrepancies, endless incongruities, appalling anachronisms, in the would-be uninterrupted series of progressive events as advocated by the supporters of the transmutation dogmas. *The assertion does not bear serious examination.*" Undeniably this is strong language. So strong that we do not see how it could be stronger.

Since Mr. Huxley was here, Mr. Herbert Spencer, another eminent evolutionist, has paid us a visit. He did not lecture, but two days before his departure, a farewell banquet was given him by his admirers, at which a number of distinguished gentlemen spoke. On such occasions a little excess of compliment is

perhaps pardonable, but panegyric can be overdone. No one doubts Mr. Spencer's ability, but to tell him to his face that he is a Bacon, and a Newton and a Locke all in one, and that he overtops all men that ever lived, cannot be otherwise regarded than as drawing a long bow. Praise, even post-prandial, ought to be sober. A man does not care to be praised for what he is not, but for what he is. Eulogy is valuable only as it is true. It so happened that much of the praise of which the speakers were so lavish was so utterly inapplicable that it must have sounded in his ears like reproach. Mention was made of the important service he had rendered to religion. Mr. John Fiske, a genial and accomplished gentleman, chose this for his theme. He undertook the needful and difficult task of an interpreter of his dark sayings, and giving definiteness to his Delphic utterances about the Unknowable. Mr. Spencer, having always carefully avoided in speaking of that mysterious Something to tell us positively what he meant by it, whether he meant thereby a Person or a Force or an "unthinkable" Neither, it was comforting to be assured by the speaker that he meant really God, or as he more finely expressed it, "that infinite and eternal Power which animates the world and makes for righteousness." If by this he intended a personal Creator, I do not, I confess, well see how the affirmation can be made to square with the unprejudiced report of the writer on Evolution in the Encyclopædia Britannica, who, in speaking of the bearing of Evolution on religious ideas, distinctly states that Mr. Spencer considers the idea of Evolution and of a pre-existing Mind incapable of being united in thought, whence it follows, there is either no pre-existing Mind, or Evolution is an untenable hypothesis. Does Mr. Spencer believe in Evolution? If so, then according to his own showing, it is impossible for him or any body else, who rightly believes in Evolution, to believe in an Intelligent First Cause. Will Mr. Fiske have the goodness to point out in what way religion is to be served by such teaching?

That we may do Mr. Spencer no injustice, let us hear what he says on this head. He tells us, "Atheism, Pantheism and Theism when rigorously analyzed severally prove to be unthinkable. All religions agree in one thing, that the Power which

the Universe manifests to us is utterly inscrutable. Duty requires us neither to affirm nor deny the personality of God. . . . It is an erroneous supposition that the choice is between personality and something lower than personality; the choice is rather between personality and something higher. . . . We rightly refrain from assigning any attributes whatever to the Ultimate Cause. . . . Our highest wisdom and our highest duty is to regard that through which all things exist as the Unknowable." Here plainly is one of those cases where the author, let him try as hard as he can, finds it exceedingly difficult to agree with himself. He starts out by saying that Theism is unthinkable, meaning, we suppose, that a God is unthinkable, but this does not prevent him from calling the unthinkable a Power revealed in the Universe: also the Ultimate Cause, in strange contempt of his own interdict which bids us refrain from assigning to it any attributes whatever. Power is surely an attribute; and it is no less certain, that the Ultimate Cause of all things is comprehensive of many attributes, such as power, wisdom, and goodness and these too knowable, as a tree is known by its fruits. It were better that he should stick to the Unknowable, pure and simple, which like Nothing and Nobody is void of attributes and without functions. Nothing and Nobody may be said to be unknowable because there is nothing to know about them, and I am not sure but they are absolute and unconditioned. They answer moreover to Mr. Spencer's conception, in being so to speak unthinkable. The resemblance extends to their invisibility and intangibleness. There is to be sure a story told of an Irishman who shot at nothing and hit it, but it rests on doubtful authority. So far as I can judge the piety of a belief in the Unknowable, and Nothing and Nobody, ought to be about equal.

Professor Youmans, another of the speakers, known to be one of the oldest and most ardent of Mr. Spencer's American friends and admirers, claimed for him the credit of having said thirty years ago (five years before Charles Darwin had published a word on the subject), "There is no other hypothesis besides the Development Hypothesis [proven or not proven] worth a moment's thought, and as for me, I assume it and go on." This assuming without proof and going on, the speaker seemed to regard as a

great merit. Now no one can say but that such a course is well adapted to save time and trouble. It is a cool proceeding, no doubt. No Arctic winter could be cooler, for who would not like to be spared the bother of proving the unprovable—when taking for granted the thing to be proved is so much easier? It is always the first step that costs. Having begun to assume, all that is necessary is to keep on assuming. Assume and go on! Believe me, there is no better receipt for world-building. Mr. Spencer has found it so. He assumes and assumes and goes on. Before he goes very far he arrives at the conception of Evolution as a universal law. Henceforth he sees Evolution in everything. It intoxicates him. He is mastered by it. He dominates it less than it dominates him. He makes his own dictionary and starts out with a new definition according to which "Evolution is the transformation of the homogeneous through successive differentiations into the heterogeneous."

This may seem to you an innocent collocation of words, but I would advise you to take care, if you have any fear of magic, and would avoid becoming the victim of a pernicious enchantment, how you yield yourself to its influence, for it is important to know that you have to do with a mighty magician—one more to be feared than he who bears

> —"the dreaded name
> Of Demogorgon,"

and that these are the very words which he conjures with a wizard's formula, in fact, powerful to bind, as it would seem, the strongest minds, and shut them up in imaginary walls of solid granite heaven-high—howbeit they are not granite, only impudent mist and false semblance, through which, happily, it is quite feasible to pass, by the help of God's grace. Doubtless good sense, which Guizot calls "the genius of humanity," can unlock

> "The clasping charm, and thaw the numbing spell,
> If she be right invoked,"

but she is too often a despised divinity, especially by the learned.

Mr. Spencer, it must be admitted, is a man of much knowledge and extraordinary resources, which make him an accomplished juggler in the use of words, whereby,

> "Obtruding false rules pranked in reason's garb,"

he is able to charm the judgment, and "make the worse appear the better reason." He is not half as modest as he seems to be. His humble avowal that he cannot know the Unknowable is made in the name of science, rather than in his own name; for, as for himself, it would seem incredible that even the Unknowable should be too hard for him. His self-confidence is unbounded. He never blushes. Armed with his formula he stops at nothing. His demiurgic labors sit lightly upon him. World-making is the amusement of his leisure. The creation of the solar system is a morning's work. He thinks the *whence* is something of a mystery, but the *how* is perfectly plain. He confines himself to the solar system, not of necessity but of choice. He tells us how the whole was formed out of a nebulous mass of diffused homogeneous matter filling space; how the homogeneous through successive differentiations became heterogeneous, the simple complex, and how in this way the new-made earth became the abode of life with man upon it, with his differentiated brain, and differentiated mind, destined to be differentiated more and more to the end of time—not according to any foreordained plan, but by the unreckonable chances of environment, heredity and what not.

The transition from the inorganic to the organic, the origination of life from that which is without life, involving Archegenesis, or Spontaneous Generation, at which Darwin, Tyndall and Huxley all stumble, is accounted for or assumed with the same nonchalant air of easy assurance as everything else. His A-b-c-d-arian formula, if we may call it so in view of its simplicity, does not fail him in the genesis of mind, which is, he holds, necessarily correlated to the brain and inseparable from it. As all cognitions are dependent upon the present organic condition of the brain, these cognitions must needs change as the brain changes, whence it follows there is nothing fixed, nothing certain, and no one can say positively that the truth of to-day will be always the truth, or the right of to-day be always the right. So far as appears, there is no power to prevent there being hereafter incarnated organized beliefs, that two and two make five, and that a part is greater than the whole, and that murder is meritorious. No reason can be given why differentiation carried on by blind

forces (intelligent design and creative activity being expressly excluded) is not just as likely, to say the least, to lead to bad as to good. It may be, however, that the dissolving and disintegrating process, consisting in a reversed differentiation, a going back from the heterogeneous to the homogeneous and the simple, which we are told is sure to take place in the end, will soon begin, and man will then be put on the downward road to original savagery and the cruelest form of beasthood. To counteract and prevent these possible tendencies and results, it might seem that intelligent moral direction of some kind was desirable, but this, we know, is wholly out of the question, as lending support to the doctrine of final causes and a belief in the figment of a personal God. Between teleology and Spencerianism there is open war. Things are because they are. We are warned that the proper thing to say is, not that birds have wings in order to fly, but that they fly because they have wings. To say the eye was made for seeing "were as flat burglary as ever was committed."

Mr. Spencer consistently undervalues all moral and religious teaching, and education in general. He does not believe in reform, or in conversion sudden or slow. The method upon which he chiefly relies is gross and organic. It contemplates some change of cerebral structure to be effected through heredity, and this takes time. Meanwhile, with characteristic modesty he proposes Spencerianism as a substitute for Christianity, seeing that has failed and lost its authority. He does this, in order that there may be no void. He says: "Now that moral injunctions are losing the authority given by their supposed supernatural origin, the secularization of morals is becoming imperative. Few things can happen more disastrous than the decay and death of a regulative system [meaning the Christian], no longer fit, before another and fitter regulative system [such as he is ready to supply] has grown up to replace it. I am the more anxious to indicate in outline this final work because the establishment of rules of right conduct on a scientific basis is a pressing need." Mr. Spencer, so original in other things, is certainly not altogether original in this attempt to displace Christian morals (it has been tried before) by something bran new and suited to the

times—morals resting on a scientific basis. How the new code is to be enforced, whether by dynamite sanctions, or none at all, is not said.

One other point, and we are done. While Mr. Youmans would claim for Mr. Spencer the honor of having been the first to adopt the modern evolutionary doctrine, this, we are told, does not constitute his chief glory. That which isolates him, and raises him incontestibly above all his contemporaries in unparalelled originality, is his grand extension of the doctrine of evolution, and his elevation of it to the dignity of a universal law. It is noticeable, that while engaged in this mighty task he finds it convenient to employ the word Progress as a synonym and substitute for Evolution. The enlargement of meaning thus gained by the use of the new term is obvious enough, but is sufficiently subtle to be easily overlooked; in the meanwhile, it is made to serve an excellent purpose. Mr. Spencer henceforth is able to figure in the twofold character of Evolutionist or (more properly speaking) Derivationist and Progressionist. Did time permit, we would like to take up for examination, that famous law of his which underlies his Synthetic Philosophy throughout, and see whether there does not lurk below a central fallacy, which vitiates the whole reasoning based upon it. Mr. Spencer instances the development of the chick from the egg as a typical example of organic progress, which consists, he says, in a change from the homogeneous to the heterogeneous, from the simple to the complex, and then goes on to say that the law of organic progress is the law of all progress in Society, in Government, in Manufactures, in Commerce, in Language, in Literature, in Science, in Art. Is it not evident that he is guilty of confounding things that essentially differ, betrayed thereto by fanciful and treacherous analogies, and the ambiguity of words? When he says that organic progress consists in a certain change which is the representative of all change, the statement at best is defective and deceptive, in that it omits all reference to the indwelling life, which is the chief factor operating the change, and which distinguishes organic progress from every other kind of progress. There is surely a difference between the organic and the mechanical, between the growth of a tree and the

growth of a house, between the growth of a living man and the growth of a statue, between the flight of a bird and the flight of a bullet, between the actuality of the human organism and the ideality of the social organism, in other words, between a man and a metaphor. There may be resemblances, and each and all of these may have many things in common, but to say that they are all alike in all things, that they all take place under the same law of progress would seem to be in the last degree preposterous.

Admiration for Mr. Spencer's talents ought not to blind Christian men and Christian teachers and ministers of the Gospel to the evil tendency of his writings. Some men, lest they should be thought not up to the times, make unseemly haste to endorse the newest science, albeit infidel. Judas betrayed his Lord for thirty pieces of silver. His weakness was avarice. Other men's temptation lies not in the direction of money, but in the vanity of being thought most liberal. Such need to be on their guard, lest this should lead to a weak and cowardly betrayal of the truth, at the dreadful risk of the divine displeasure.

According to the derivationists the only alternative to their doctrine is the doctrine of "special creations," but the alternative is one we are quite willing to accept. We accept it of choice and necessity. It is certain all things did not come into existence at one and the same time, but one thing after another in long succession. Unless we conceive the universe to be causeless and uncreated, creation must have had a beginning in some miraculous act. Let us assume that this first miraculous act was the making of the stuff out of which worlds were made, call it, if you please, star-dust, and that out of this star-dust arose the solar system with the earth as it was before life had appeared upon it. By the Spencerian process this must have taken innumerable years. Surely now, if not before, we may suppose an exigency to occur which makes necessary the putting forth of a new act of creation. Organic life being something not provided for in the original creation needs to be miraculously supplied, to the end that a new order may begin. It is not enough, however, that we have life. Between life in its lowest manifestation and in its highest there are an infinite number of leaps, each of which transcending all known powers of nature has fur-

nished from time to time new occasions for miraculous interventions. These "special creations" have beautifully served to punctuate the ages, and to emphasize the presence in His works of the Everlasting One throughout all the past, His last creation being man, a recent act. Why is it that this miraculous witnessing, through mighty periods down to yesterday, with all its thrilling and comforting assurances, is studiously ignored, and instead of being a joy is a displeasure to many? It seems incredible, when Science unites with Scripture in affirming a creative nearness and dearness, men should be so foolish as to push their Maker away from them; and refusing to recognize Him under His name of Love, admit preferably the conception of a cold and characterless Being or Brahm, who concealing Himself in the ineffable solitudes of Eternity has never so much as once (or if once, only once) left His dark hiding place.

It has been said by some one, "If there be no God, man must invent one." He is a necessity of philosophy. He is a necessity of the human heart. "My heart and flesh," says the Psalmist, "cry out for the living God." But Mr. Spencer tries to discredit this instinctive craving. The sentiment of religion, according to him, is a transmuted feeling of low origin, and consists for the most part in a creeping of the flesh in the presence of the mysterious and the inscrutable. Religion has nothing to do with right conduct. Morals relate to man, not to God. He denies that they possess any supernatural authority. He writes a book to secularize them. Of the object of worship he does not, as we have seen, permit us to predicate any attributes whatever, least of all, those of a moral kind, such as holiness, justice, goodness, love. Whether piety and virtue can breathe and live in the exhausted receiver of this air-pump would seem to be more than doubtful. We may charge it to the error of the moon, and mourn over it, but the ugly fact remains that we are brought face to face with a new aggressive Islam, with its new formula of faith, proclaiming, There is no God but matter, and Spencer (or Darwin) is its prophet. Professor Tyndall, one of the chief apostles of the new *credo*, tells us "We must radically change our notions of matter," that is, must believe in its sufficiency to answer all demands, not doubting that it contains

"the promise and potency of all terrestrial life." If this affluent outfit be deemed too scanty there is nothing to prevent our adding to it *ad infinitum*, or our thinking into it all the attributes of the Godhead. By this easy method we can make molecules the author of mind, and atoms the architect of the universe. If all worship was originally fetichistic, the worship of matter is only a return to it, and can plead undoubtedly a great antiquity in its favor. The singular felicity of this belief is living and dying to be "without God and without hope in the world."

Evolution, we know, boasts much, but notwithstanding its grandiose pretentions, its highest certainty does not rise above the dignity of a guess, infirmly standing on one foot. Meaning that form of it which practically and really if not avowedly leaves out God, having no use for Him, how it impoverishes, degrades and vulgarizes everything! It is hostile to all moral loveliness. It dethrones beauty and robs the universe of its divine meaning. It is dirty and mechanical. It is mean and microscopic. It is in love with smallness. It is amorous of protoplasm. The nearer it gets to nothing the better is it pleased. A cell is "a thing of beauty and a joy forever." It is fond of fossils and revels in ossuaries. Its lore is of the ground rather than of the skies, and is incurious and indisposed towards immortality. If it believes in a Deity it is a useless one. A God that never acts, what better is He than no God? And so, what better than no God is that most desolate conception of a God sitting in idle empyrean ease outside of a long abandoned and unvisited universe, lazily averse to all meddling with its ongoings, dozing away an unemployed eternity, having been the artificer of a machine that runs itself, whence it happens, that all sentient existences including man, thrown promiscuously into one common hopper, pass between the upper and nether millstone of that pitiless mill of destiny which goes grinding on, grinding on, never stopping, never caring, forever and ever and ever, the Unknown God of unknowable attributes, but conjecturally, as most consistent with this view, demiurgic or demoniacal, not otherwise revealed except as the sweating Vulcan of Force—which if it be Mr. Spencer's or Mr. Huxley's God, the God of the Evolutionists is not, Heaven be praised, the Christian's God, the God and Father of our Lord Jesus Christ.

FAITH AS THE BASIS OF SCIENCE AND CHRISTIAN PHILOSOPHY.

By Mr. C. S. Towne, Cobden, Ill.

IN the development of this idea it becomes necessary to show that faith is not only one of the essential and inherent elements of human action, but is also the predominant element, and the only one which lifts the exercise of all the other senses infinitely above the exercise of all brute sense. The senses are the inlets to all knowledge; they are also the certain exponents of the law of the Equivalence of Energy. Energy is inherently and exclusively the power of a person to act. There is no exception to this statement.

Human energy is manifested principally as light, heat, sound, and motion. My own consciousness furnishes the demonstration of their equivalence. I myself possess light, heat, the power of giving sound, and causing motion. Correlated to these, I can see and feel, hear sound, and observe motion. But I, who possess these powers, whether emittent or receptive, am one, and I have one will to exercise all these functions of energy. There is one central power of thought; and I think and will, and action flashes out through any one of the avenues of sense as I will it to do. There is not a separate Ego for each sense, but one for all; and Energy is seeing, feeling, hearing, or motion, as I will it to be; and the organ through which it acts determines the form of its manifestation. As these senses all belong to one Ego enshrined in one organic body through which all forms of eneryg are manifested and recognized, the demonstration of the equivalence of energy is certain. But mark it, this does not include the law of the Correlation of Forces.

As it is by the power of the thinking, self-acting will that all energy is manifested, we must conclude that thought lies back of all motion. Hence light, heat, sound, odor and taste, as the

resultants of willing thought, are all truly "modes of motion," because they are inherent, not in matter, but in mind, which, as a combination of soul and spirit, is the organized fulness of all action and motion. The failure to recognize this most important truth is bringing endless confusion into all the arguments for and against material evolution and materialistic infidelity. There is a confusion of truth and error on both sides. But we see that the brute possesses all these equivalent manifestations of energy, sometimes even in a higher degree than man; yet the brute cannot philosophize nor lay up increasing stores of knowledge. Then we may take from Nature the whole animal creation, and yet light, heat, sound, and motion superhuman are sublimely and grandly manifested through all the circling seasons, while there is no philosophizing, no unfolding and treasuring up of knowledge; but the manifestations of this omnipotence of energy go on from age to age with no such changes as constantly mark the rapid evolution of thought. It becomes immediately evident that man possesses powers of a higher grade than any manifested in Nature. It is certain that he possesses an inner power of thought which is able silently and invisibly to inspect the various operations of Nature, and then to classify and subject them to his own necessities and pleasures in a manner above and beyond those uses seen in the brute to be merely instinctive. He also has the power to express these thoughts in spoken words conveying his ideas to the mental grasp of all hearers. He has the still higher power to express thought in written language as the permanent conservation of his speaking power. Correlated to this, he can look upon written symbols and recognize the ideas that have been spoken and written by other men in all times present or past; and if these written symbols are the records of truth, no lapse of time can abate anything from the influencing power within them which ever lays hold upon the comprehensive faculties of all minds whose eyes look upon them. In this fact lies the demonstration of the everlasting Conservation of Energy. The power to write, and the power to remember, is the power to conserve through indefinite time to come. This power of thought is also a constantly unfolding power from the very dawn of infancy, ever reaching out for new discoveries, and seeking

untried paths in which to explore the ever-rising future whose enchantments of distance seem never to fall upon the enquiring mind. If we now take into account all human capabilities of action, we see that they are manifested on two planes; a lower plane of silent or unspoken action, and a higher plane of spoken and written thought. We also see that the whole line of action embracing both planes, belongs inseparably to one individual entity; one indivisible personal consciousness flashes through the whole line, from the simplest act of touch up to the highest and most complex expression of written thought. It is also seen that the thinking energies of this higher plane are constantly reaching down into and controlling the evolution of all action in the lower or silent plane of man's mechanical action. In this higher plane abide those things to which Paul refers when he speaks of the eternal weight of glory worked out for us, while we look not at the things that are seen, but at the things which are not seen; these are eternal, those are temporal.

These unseen things are ideas from which spring the forms and relations of all material objects, ever changing, fleeting from us and giving place to new forms. But the ideas themselves, if truthful, are eternal; and, conserved in memory or upon the printed page, abide forever. Then because the seen things are constantly changing and passing from us, there never can be in this lower realm of Nature an absolute and certain demonstration of the Equivalence and Conservation of Energy; much less any demonstration of the far higher law of the Correlation of Forces.

But the question arises, by what means is man enabled to manifest so fully these powers of spoken and written thought? I answer, solely by the sense of hearing aided by the inherent faculty of imitation. The new-born child must pass through many months and even years of personal instruction constantly exercising its powers of imitating sounds given, and believing what is said to it. By this means alone he acquires the power of speech, and then of reading, and thus his powers of thought are started upon an upward and unending career of action. But there must be in every case an antecedent personal instructor whom the child hears and believes. Hence faith in our fellow-

men comes alone by hearing, and it is alone by this sense that we come into perfect correspondence with other intelligent beings. Through the complex actions involved in the correlation of speech with hearing, ideas flash back and forth from one mind to another; but this correspondence cannot obtain between mind and material objects, unless there has first been established a correspondence between the mind of the observer and the mind of the person who made the objects, through the hearing of spoken ideas.

But the question arises, from whom did man originally receive this power of speech which is to him through the avenue of hearing the golden gateway to all knowledge? Present experience shows that every new-born child must receive it from an antecedent person already educated; and if so now after the lapse of several thousand years, most certainly must it have been so in the beginning. But if man were evolved from the brute by insensible gradations, we know absolutely by the very nature of the case that there was no antecedent person in Nature to give him this education. On the other hand, if he were the special creation of an all-wise, personal God, then we have in that Being a competent Instructor in whom we find the full equivalent of human thinking and speaking energy. Then, as we see in Nature infinitely varied manifestations of light, heat, sound and motion; and as these lower forms of energy in man cannot be intelligently and happily manifested without the controlling presence of the higher thinking and speaking energy, so we must conclude that these unspoken manifestations of energy in Nature are also inseparably connected with an infinite Mind and Heart whose spoken thoughts have been, and still are, to us the unfailing fountain of all knowledge, and wisdom, and love. That this energy manifested in Nature is the same with the human is evident from the fact that man can use it for the indefinite extension of his own limited powers of action. It flashes out continuously in the same lines of action dictated by the independent and conscious Ego of humanity. As we have thus reached the source of the power that enables man to speak, to learn, and to philosophize, it will be proper to make inquiries in regard to the legitimate field of his philosophizing. We cannot for a moment doubt that

the universe of Nature is embraced in this field, because it lies in the same plane with man's own unspoken action ; and not only so, but it *underlies* the human plane of action, furnishing all the material upon which man operates; and without the sphere of Nature, man could not himself have a sphere of action. Man's questionings and researches in this field we call Natural Philosophy.

But we find ourselves capable of entering upon a higher field of philosophizing in the unseen realm of the human mind. I explore this field in my own mind by simple introspection; but if I would pass into that portion of the field occupied by other minds, I can only do so by the gateway of hearing and the act of faith. But as man finds legitimate work searching for truth in the field of Nature, it seems only reasonable that his questionings be permitted to extend to the infinite Mind inseparably connected with Nature and controlling it. And as the higher field of Mind can only be presented in spoken and written language embodying ideas, it became reasonable and absolutely necessary that God should make both spoken and written revelations of His thoughts to man. In the sphere of man's mechanical work we know that the thinking power controls all action, and the work may be carried on by the competent workman without any speaking. And we see also that all the operations of Nature outside of man are wrought out in perfection without the use of a single spoken word. But we find in Nature man as its crowning work springing from the obscurity of an inscrutable atom, yet possessing powers of thought which through education can speak and write and govern infinite varieties of mechanical action independent of the mother Nature from which he sprang. This power of speaking and writing cannot be developed and governed by the silent evolutions of Nature. The unspeaking motions of Nature can be wholly controlled by unspoken action; but this human thinking and speaking can only be controlled and guided by speaking action. Hence, we accept without hesitation the Bible as a written conservation of that divine spoken energy first addressed to man for the express purpose of educating and governing the speaking part of God's creations in this universe of Nature.

But the question is now pertinent, How can we most intelligently enter upon our researches after knowledge in the broad fields of Nature and of Mind? How can we best lay the foundations of a substantial and reliable philosophy? Shall we begin by declaring that if there be a God, He is the Great Unknown and Unknowable, and immediately dismiss Him from all connection with our researches? Shall we reject the idea of faith in a once spoken revelation now written upon the pages of the Bible, and with scornful contempt toss the book back among the myths and legends of the long past?

Possibly those who do this may be found lacking in true wisdom and common sense. If it were certainly seen that all human thought is wholly evolved from material elements, and that all objects are simply compositions of matter from which all traces of an external, omnipotent mind-action are wanting, man might then study the complexities of his environment wholly ignoring the existence of any supernatural power. But such is not the case. There is no line of study, whether in the realm of Mind or of Nature, along which the scientist pursues his researches, in which he does not at some point meet resistance of an unseen power which baffles every attempt to lay bare the secret springs of its action.

When we are about to examine a complicated machine never before seen, if we will accept, by the action of hearing and faith, the explanations of the inventor and maker in regard to its structure and design, we shall be at once helped to a solution of our questioning, and then be able to philosophize intelligently and instructively to others. But if we politely waive or rudely push aside the maker with his proffered explanation, and say we will trust to nothing but our own personal observation, we will in all probability ignominiously fail, and be brought to shame. But here we stand amid the sublime mechanisms of Nature, not merely as outside spectators, but as living and interested links in the mechanisms, and our enquiring minds ask after the secrets and the reasons of the constructions that surround us. We climb the spiritual ramparts of thought, and in the unseen domain of Mind our finite and untutored imaginations roam at haphazard from point to point seeking to unravel the mysteries

we meet. And though the relations of mind to matter, and the constructions of material Nature are far beyond our highest powers of analysis and imitative synthesis, yet with an insufferable pride of egotism we waive aside the Designer and Maker of these marvellous perfections, and scorning the idea of faith in His spoken revelation as an authentic source of information, we proceed to build philosophies over which the angels might laugh and weep by turns. Let us follow for a moment on one of these lines of investigation. With a microscopic prolonging of sight we pierce the fibres and cells of living tissues till our vision rests upon the placid waters of the protoplasmic currents, and we see the wonderful motions that are building cells and weaving tissues; and we ask, What *is* the power that so independently of gravitation is thus forming the marvellous complexities of organic life? We ask in vain; for all boasted powers of observation can never fathom the transparent bosom of these tiny fountains that sparkle at the bottom of our keenest sight. Here lies the key upon the first page of revelation. "*The Spirit of God moved upon the face of the waters.*" I feel sure by this statement that the powers of human sight have reached their limits. Faith alone, as the climax of perception, can now lift the enquiring mind into the dominating realm of thought whose all-pervading action controls in the silent depths of these fountains the materialization of all created objects. Whether in the wide expanses of the ocean, in the waters of crystallization, or in the protoplasmic currents of vegetable and animal tissues, *the Spirit of God is moving upon the waters.* But this key itself embraces a wide range of study extending through both spheres of the action of energy, which we have not room here to unfold.

The history of the human philosophies is largely a history of failures to open these doors of knowledge by the key of divine revelation. As it is the unseen realm of thinking mind in man which guides and controls all the unspoken work of his hands; and as by correlation the same must be true of the divine thinking Mind in relation to Nature, it follows that Mental Philosophy should be the leading study if we would gain a clear insight into the philosophy of material Nature. If the action of mind in its own higher plane of thought can only be expressed in speaking

and writing, then all explanations touching mind, from any superior source of knowledge can only be given by speaking, and received by the hearing of faith; and this faith can only be securely placed in the God whose infinite Spirit alone is the Father and Teacher of our finite spirits. Hence, the recorded revelations from God to man found in the Bible, are pre-eminently revelations of mind in its highest or speaking action, and constitute the only reliable information in regard to the nature of mind, its attributes and laws of action.

The ancient heathen philosophers did not have this revelation of the Creative and Paternal Mind, and they groped after the secrets of Nature and of mind as the blind man gropes his way along the street, feeling for the path that may lead him home. What was the outcome of their researches, and what estimate does the Spirit of truth place upon the results of their labors? One short sentence records the utter failure of their seeking: "*The world by wisdom knew not God.*" That was enough. Failing to know Him, they knew nothing as they ought to know. And if they knew not the primal cause, how could they philosophize intelligently upon the intricate and ever-varying effects? What else could they do but stumble, as they did, upon isolated truths dimly comprehended, and bring them out as rough stones for the master-mason of a coming age to cut and polish and fit to their places in the temple of science and philosophy? But centuries and ages have rolled by, and we see not yet the fair proportions of this temple outlined against the clear sky of a pure and correct thought. That I may not seem too radical in this statement, let me introduce to your notice some modern testimonies bearing upon this point. In the *Princeton Review* for September, 1878, Dr. Henry Calderwood, of Edinburgh University, has a paper on "The Problem concerning the human Will, as related to Scientific and Philosophic Theories." He opens the discussion with these words: "The study of man has become a pressing demand in our times. Whether we turn to the circle of physical sciences on the one hand, or to schemes of mental philosophy on the other, it is obvious that a full and systematized knowledge of human nature has become a first requisite for physicists and philosophers alike."

Further on he says: "I venture to submit that such knowledge is a want of the times, not merely on the part of the people generally, but also on the part of those who are competent guides of others on distinct divisions of the great subject." He further admits that this study of human nature "is the hardest piece of study which scientific men have faced;" and that in the pursuit of it, when all results are considered, "they have done little more than make a beginning." Again he says: "There is a block on the line of progress. The will-problem is the unsolved scientific problem." Then referring to the fact that along this line of research the investigators have come to a dead halt at the hither boundaries of the ever-onward-reaching realm of mental action, he further says "that we have no science of things within this region. There are facts, and the facts are well known—so well known that the busy multitude are as familiar with them as they are with taking their meals, or attending to business; but the science which seeks to embrace the universe has not advanced to include within its sweep these every-day facts." Again he says, "It is a science of facts the most familiar in human life which is altogether wanting; and no progress is being made by scientific men to supply the want." In view, then, of this want, how does he propose to gain this knowledge of human nature? He says: "There is, and there can be, no dispute over such fundamental positions as these, that facts must afford the basis for all enquiry, and that legitimate induction from such facts must be accepted by all intelligences." Again he says: "I point to a full and systematized knowledge of human nature, as this is to be reached through exhaustive analysis of human experience, and also by summary of the latest and surest results obtained by anatomical and physiological research." Again he says: "It must, therefore, be granted here that we must take human nature as it is, and seek by analysis the simple or primary elements in our experience."

And again: "But whether we be scientific or philosophic in our standpoint and training, we are all agreed in this, that the question must be worked out on the scientific line, depending on observation and induction, or else it must be abandoned." This is the testimony of but one witness, yet I think it is sufficient.

It is emphatically and decisively to the point, establishing the statements I have made. There is indeed no established science of the relations between matter and mind as men have sought to unfold these relations by researches leading from material phenomena, up to those purely mental in their character. You will see that the proposed plan of gaining this science of the facts lies almost wholly within the lower plane of silent action; and that in no case does he rise into the higher plane of perfect spoken and written action by the way of hearing and the act of faith in any divine revelation. Possibly he, with others, might be surprised at the idea of gaining a science of the universe in this way. But may it not be possible that the method of research depending wholly upon human resources, is, to say the least, partially one-sided, and so in some measure misleading? The same mind that observes, analyzes, and forms inductions, also hears, understands, and believes. And when this mind seeks after knowledge, should not all its powers be brought to the work of seeking? If our rudimentary plane of knowledge rests upon the immovable foundation of faith in the parental instructors of our childhood, coupled with the work of observation and imitation—is it not reasonable when our questionings reach out to the origin and constitution of our own minds; to the laws that govern their action, and to the relations between mind and matter, that we should seek to lay a foundation for this knowledge by faith in the revelations of that omniscient One who gave birth to that very mind thus seeking out a science of the universe in which it finds itself a component part?

In the paper from which I have quoted Dr. Calderwood says: "Scientific men who would give us a science of the universe, including all that pertains to man, must offer us a science of the conditions of human knowledge, going to the root of all our tests of certainty." What is a science of the conditions of knowledge, at least, in outline? With regard to rudimentary knowledge embracing the power of speech, and the elementary use of words and numbers, we know that the invariable conditions are, first, antecedent and personal instructors; second, hearing, observing, and imitating; and third, hearing, observing, believing, and imitating. But when, in the process of this development, we pass

from the restraints of parents and teachers, is it scientific that we should now discard the hearing and believing, in the further progress of all our higher education, and confine ourselves to observation and induction as the scientific line, claiming that if knowledge can not be obtained in this way, the search must be abandoned? In my humble judgment based upon many years of study, nothing can be more unscientific. Where can we find more certain conditions of knowledge than in hearing Him who speaks from heaven, and whose words are truth without any mixture of error? Where shall we find the root of all our tests of certainty, if not in the words of Him who made all things, and therefore knows perfectly the most occult secrets of their construction? As this power of hearing and believing reaches entirely through both planes of human action, it must be strictly in accordance with a science of the universe embracing all that pertains to man, that in building such a science, we should constantly make use of this faith that comes by hearing or reading, in connection with observation and induction. But you may ask, Why is the action of faith to be regarded as the leading exercise in all scientific research? For the simple reason that the unseen realm of thought, and speech, and idea, to which faith belongs, is the realm that originates, guides, and controls all the evolutions of action manifested in that lower and objective realm which lies within the range of observation and induction. We know that this is the case in the little universe of which man is the central, originating, and controlling power. We know that we can not study human work, and ignore the unseen human thought that permeates that work.

Is it possible, then, that we can study the superhuman universe with man as its crowning and dominating top-stone, and at the same time ignore the divine, omniscient thought which radiantly permeates and glorifies it all? I answer without a shadow of hesitation, that man never has done this, and never can do it successfully. But you may ask, Is it possible with the aid of divine revelation to construct a science and a philosophy of the universe that shall meet every demand of reason, and answer the questions suggested by every point of our environment? Robert Flint, of Edinburgh University, treating of phi-

losophy as the science of sciences, says: "I believe in philosophy as metaphysical; as entitled and bound to elaborate a theory of Being and Becoming. If I am not mistaken, philosophy must treat of final as well as efficient causes, and endeavor to forecast, as far as possible, what is the goal of science, and of the world, and of life; what is the worth of enjoyment, and of truth, beauty, virtue, and piety, in relation to one another and to the great final issue of existence." But to what source of instruction does he turn our attention? This is what he says: "Hegel, with all his faults, will probably be found the most helpful of teachers to the student in this region." But he cautions his readers against expecting too much from the study of Hegel. "History warns us that the study is only too likely to end merely in repetition and commentary." What a consoling assurance to know that in solving these great questions of origin, existence, relations, and destiny, we may turn to Hegel with all his faults! And the very best he can do is to hold out to us a marred and broken pitcher partly filled from the muddy stream which has come down to us from "the times of that ignorance" when God suffered men in the highest pride of their intellect to exhaust the utmost powers of reason in striving to throw light upon the illimitable past, the complex present, and the unseen future, only to fail utterly. What is "Hegel with his faults" to Him who has no faults; in whom are hid all the treasures of wisdom and knowledge; whose understanding is infinite; and whose Spirit can lead us into all truth, and is ever willing to do so, if we will only come to the fountain of His word seeking and asking in faith? The study of the Bible in connection with the book of Nature is the open highway, and the only way that leads to the solution of all the subtle and far-reaching questions which the line of human observation, analysis, and induction alone has never answered, and never can. We know that faith, with observation, lies at the base of all our rudimentary knowledge; and though in its beginnings an instinctive and unreasoning faith, it is not a blind and haphazard faith, but one that lays for every one of us eternal foundations of truth upon which, if rightly directed, we may build and beautify the temple of knowledge forever. And this same faith with a strong clasp of the hand

and an unfaltering step, leads us right on without any break in the path, into the green and blooming fields of thought that stretch away to those eternal hills upon whose shining summits truth is crowned and throned in the omniscient One who as Creator has made us, but who as a loving Father has spoken to us to tell us that we are His children, and if we lack wisdom we can get it from Him in liberal measure, and without any chiding. I am well aware that the Bible is regarded simply as teaching the science of theology; as delineating a system of religion; as unfolding a plan of salvation from sin. But what do these ideas of theology, religion, and salvation embrace? They take in the whole realm of that higher range of thought expressed only in spoken and written language; they embrace all the relations existing between separate and individual minds both human and divine. But theology embraces not only the science of God as a thinking and speaking Spirit, and a living Soul, but also the relations which this God sustains to the universe as a Creator and Ruler; and these relations reach down to the smallest atom of dust, to the finest attenuation of cell-fiber, which go to make up the earth-globe and all the animated creations that dwell upon it. Religion and salvation not only embrace the human soul and spirit in all their higher relations to God as a Soul and Spirit, but they reach to the very bottom of all man's most intimate relations with Nature as an ever-nourishing mother, furnishing not only sustenance, but a wide field for the evolution of his designing and formative powers as the subordinate ruler of Nature. It then becomes not only reasonable, but scientific; and not only scientific, but absolutely necessary, that the Bible as a revelation from God, while giving its all-important lessons of divine love and mercy, and human obligation and duty, should also make frequent and intelligent reference to those points of service included in the lines of research which man's enquiring and reasoning nature prompts him to follow out and unfold. The Bible not only reveals God as the Father and Teacher of human speaking spirits, but as the Inventor and Architect of all the intricate mechanisms in the universe. Hence the Bible is the only authentic and genuine text-book, not only of metaphysics, but of all material physics. The very book, and the

only book where we may obtain intelligible hints affording substantial and reliable aids in prosecuting our researches through the domains of Nature and of Mind. "The entrance of Thy Word giveth light," not alone in regard to religion: its light shines down into every secret recess of Nature where the Spirit of God is silently controlling her endless evolutions. "Thy Word is a lamp unto my feet, and a light unto my path," not only to lead us from the dark byways of sin into the ascending highway of life and immortality, but to light our steps along every legitimate path of enquiry whose open gateway invites us to enter.

A FAMILIAR PASSAGE.

I HAVE seen
A curious child, who dwelt upon a tract
Of inland ground, applying to his ear
The convolutions of a smooth-lipped shell,
To which, in silence hushed, his very soul
Listened intensely; and his countenance soon
Brightened with joy; for, from within were heard
Murmurings, whereby the monitor expressed
Mysterious union with its native sea.
Even such a shell the universe itself
Is to the ears of faith; and there are times,
I doubt not, when to you it doth impart
Authentic tidings of invisible things;
Of ebb and flow, and ever-during power;
And central peace subsisting at the heart
Of endless agitation.

—*Wordsworth.*

THE INVOLUNTARY LIFE.

[Abstract of a paper read before the American Institute of Christian Philosophy, October 6th, 1884.]

By Professor E. P. Thwing, Ph.D., Brooklyn, N. Y.

President of the New York Academy of Anthropology.

THERE are some features of the Involuntary Life that furnish an instructive parallelism to religious truth and experience. Man and his Maker, the cosmos and the Creator should be studied together. Theology and Anthropology are correlative, if not co-ordinate systems. The facts and processes of Human Life are continually used by our Lord to illuminate spiritual truth, and the final philosophy will harmonize them both. Dr. W. B. Carpenter, of London, a Christian scholar of high repute, well says that "Theologians cannot more powerfully attract the scientific student to religion than by taking up his highest, grandest thought and placing it in that religious light which imparts to it a yet greater glory."

Principal Dawson urges the removal of the veil of mediævalism from God's Word, that we may fairly compare new science with old revelation and thus vindicate the unity of all truth, whether of human discovery or of divine revelation. Biblical doctrines, he says, admit of scientific treatment and there should be more friendly comparison of views between students of the divine Word and the divine World.

What is the Involuntary Life? We may note its facts, if not its factors. We may point out its phenomena if we may not formulate its philosophy. The genesis of the Will, physically or metaphysically viewed, is too profound a theme to enter upon at this time. In a word, we may say that the faculty we call the Will, a free, self-directing power, puts forth during our waking hours acts which we call volitions. This conscious activity is, briefly, the Voluntary life. When the will relinquishes its control and yields to influences without, a new condition begins.

The surrender may be partial, as in reverie. Ideation becomes incoherent, because the helmsman dozes at the wheel. In mania the abdication is complete. The ship drifts rudderless. Between these extremes we have sleep, somnambulism, ecstacy and other phenomena that may be included in the term Involuntary Life. The trance is regarded the supreme expression of this unconscious, automatic activity. It occurs pathologically, as in hysteria and epilepsy. It may be artificially induced through expectation by an individual when alone, or by another person, largely through the influence of suggestion. The patient gives his complete, engrossing attention to a sound, motion or object, which idea, sooner or later, like Aaron's serpent, swallows all the rest. Intensity of thought in one direction tends to vacuity in all other directions and this to ecstacy, it may be, or to sleep and physical insensibility. The processes are slow with one person and rapid with another; slow or rapid with the same individual, as his will is at one time recalcitrant and his attention diverted, or rapid at another time when he is quiescent, acquiescent and co-operating.

This is a subjective phenomenon. The establishment of this fact is one of the landmarks of progress. A dozen years ago this branch of Physiology was "as unexplored as Central Africa," to use the phrase of the late Dr. George M. Beard. The problem of the Involuntary Life is not yet solved, but when a man says that there has been no progress, he proclaims his ignorance; and when he says that there never will be, he announces his incapacity. He repeats the folly of the Florentines who refused to look at the sattelites of Jupiter through Galileo's glass lest they should be convinced. To say that investigations into these psychic phenomena are "more curious than profitable," shows one lamentably blind as to the relations of the theme to human welfare. Were medical science alone interested in its pathological bearings, particularly upon the subject of Insanity and Mental Therapeutics, the matter would be of the first importance. The increase of mental diseases is now far ahead of the increase of population. Surgical science, too, is interested in any safe substitute for costly or perilous anæsthetics. The Sociologist, the student of Heredity and kindred themes related to criminal responsibility, the validation of testimony and the interpretation

of delusions that are ruining thousands by their baleful influence, cannot help seeing the value of this study.

Religious experiences, also, which our daily speech has monotonized may grow more august and authoritative when viewed in their psychological relations. Communion with God; the illumination and guidance of the Holy Spirit; full assurance of faith and its almost incredible remedial power in disease; miracles of ancient and modern healing; the biblical trance; the temptation of our Lord; the personality and ubiquitous activity of Satan; the reality of demoniacal possessions; the physical sufferings of martyrs apparently suspended by the action of their enraptured minds; certain phenomena of revivals; the art of winning men; death and immortality—these are some of the topics that are invested with new significance when studied in connection with the Involuntary Life as shown in the artificial trance.

For instance, when we behold the wondrous witchery with which a human will may enthrall a consented soul, may we not reason *a fortiori* as to a sway more subtle, imperious and ubiquitous by which either God or Satan holds the will of each of us?

Again, when we see the mental panorama of one human brain made to be the scenery of thought in another; when not only the imparted ideas are sharp and clear, but the emotions of the percipient, also, are those of the agent, may we not gain some conception of what spiritual intercourse with God is when our voluntary, self-directed life is yielded wholly up to Him; our whole personality moulded by the divine indwelling, so that we think God's thoughts after Him, "filled with the fulness of God, partakers of the divine nature"?

If I am able to transfigure a face of quite ordinary intelligence into ecstatic radiance by a temporary control, by momentary suggestions, how much greater the transforming "beauty of holiness," which God can create in us as a permanent characteristic by the continuous revelation of Himself and of the unseen world to our illumined thought! As we see the entranced fall swooning in a transporting vision, we wonder no longer at the overpowering emotion that caused in Daniel fainting and sickness certain days. In the case of martyrs, and thousands since,

who have met exquisite torture serenely and even jubilantly, may we not see illustrated the simple yet profound axiom stated by President Porter in his Psychology, namely, that the law of enrapturing emotions is one of inverse ratio; intellectual perceptions are quickened at the expense of physical sensation, and *vice versa?* Concentration in one direction inevitably suspends it in other directions. Moreover the completeness with which the voluntary life is abnegated, measures the thoroughness of the control exhibited in the Involuntary Life. When we see a man so enthralled by his fellow that the verities of existence, his own identity even, are contradicted, no one can doubt the possibility of diabolic possession as in earlier days. If this be a perilous power, we ought not to be willingly ignorant of such subtle and seductive devices, or hide our head like the ostrich when in danger. On the other hand, we get here a glimpse of the amazing resources, human and divine, that are yet to be utilized in winning men to duty and to God. The homiletic relations of the theme are of vital importance. They interpret the success of those who, having learned to yield, teach men to obey and hold them by a wondrous power, masterful and beneficent. A cold, wary temperament, an introspective, premeditative spirit is not so likely to submit to the guidance of the Holy Ghost; but when thought, will and sensibilities are yielded to His inspiration, "streams of power from on high discharge themselves unchecked into the breast," as Von Herder expresses it. Science teaches us that this globe intercepts but two billionths of solar radiation, and so five hundred thousand million worlds like this would be needed to utilize it all. This relation of solar and telluric energy is but a type of the unutilized resources we have in God, the central, imperial and eternal reservoir of moral power. The speaker who gives himself up in the fullest self-abnegation to the sway of this divine polarization will draw men to himself and to the truth, as doves to their windows. The Involuntary Life we are studying affords an analogue if not a parallel to that mental state into which men in Bible times were wont to pass. So far from being a sign of mental weakness, the trance is one—remarks Dr. William Smith of London—"into which many, if not most, of those who have left the stamp of

their own character on the religious history of mankind have been liable to pass at times." The two conditions placed side by side are "concentric circles," to use Dean Trench's phrase. Here, however, as in miracles, tongues and healing, we differentiate the work of man from that of God in the origin, the control and the purpose of the phenomena.

Finally, in the vividness, accuracy and intensity of the soul's unconscious life as revealed in experiments with Trance subjects, we have a prophetic hint of the immortal supremacy of the spiritual life over the earthly, transitory life of the body. Processes of automatic computation of time, for example, or "unconscious chronometry," illustrate this superior accuracy of involuntary action. Francis Galton says that "Consciousness seems to be a helpless spectator of but a minute fraction of a huge amount of automatic brain-work." Physiologically or ethically viewed, our unconscious life is the truest. Its present volume and power no psychometric experiments have yet fully determined, but they point to a grander future when the fleshy frame shall no more impede the volitions of the freed spirit. A true scientific instinct is calm, candid, cautious and discriminating. It is hospitable to all truth and willing to be taught. We know in part and prophesy in part. To-day is but the cradle of to-morrow.

> "The highest mounted mind
> Still sees the sacred morning spread
> On silent mountains overhead."

Quasi cursores lampada tradunt. Swift messengers, indeed, are we, as Lucretius says, carrying lamps. No nobler work can we do as Christian scholars than to transmit from one age to another the light which we receive. O brothers, in this sea of mystery shall we stand still like islands, or move on like ships?

MONTHLY MEETINGS OF THE INSTITUTE.

By Charles M. Davis, Secretary.

As the first Thursday of April fell in Holy Week, the monthly meeting of the Institute was held on the following Thursday, April 9th. The devotional exercises were conducted by the President. After the reading of the minutes, which were approved, the Secretary read the following "Easter Appeal," which had been sent to friends of the cause in New York and its vicinity:

New York, Easter, 1885.

Dear Sir:

It is believed by the officers of the American Institute of Christian Philosophy that there must be many persons who appreciate its work in producing a solid literature on the lines of the relations of Science and Philosophy to Religion, and who are willing to aid it, although they have not become members; and that there are members who would give further assistance if they knew our needs.

We need *nothing for salaries*, the officers discharging their duties without compensation, and all of them making pecuniary contributions to sustain our operations. We do need money for securing proper lectures, for printing and distributing our publications, and for the necessary clerical help in maintaining the increasing correspondence of the Institute.

That you may know our work we respectfully ask you to read the accompanying circular.

We could use thousands of dollars profitably, but now tabulate only the most pressing, immediate demands upon our treasury as follows:

1. For a course of lectures and papers, - - -	$500
2. For distribution of our publications through the Foreign Missionaries of the different churches, -	100
3. For similar distribution through the colleges of our land, - - - - - - - - -	100
4. For necessary expenses of office, postage, etc., -	100
	$800

Appeals from India and Japan, to which we cannot respond, are before us now. It has occurred to the officers that a mere

statement would elicit prompt help, and that an Easter Offering, to assist in repelling the attacks made on the Risen Lord, adored by all thoughtful and devout Christians, would greatly increase the efficiency of the Institute.

If you feel disposed to help you will kindly indicate to which of the above departments your offering is to be applied; if to the foreign work, through what Board; if to the home work, to what college. Suitable acknowledgments will be made. Checks may be made payable to any member of the Executive Committee, or to the Secretary, 4 Winthrop Place, New York.

The President then read the Program of the Seaside and Mountain Summer Schools, to be held at Asbury Park and Key East in New Jersey, and Richfield Springs in New York.

The paper of the evening was by Rev. Amory H. Bradford, D.D., of Montclair, N. J., whose subject was, "The Vicarious Principle in the Universe."

The paper, which will be published in an early number of the next volume of CHRISTIAN THOUGHT, was discussed by Dr. Wendell Prime, Hon. A. B. Conger, Dr. Charum, and others.

FUN IN PHILOSOPHY.

AMID our serious discussions of the important problems of science and philosophy it will be useful to notice how the "funny men" in literature are impressed.

Here is a paragraph on "Upsetting Moses," from an article in the *National Baptist:*

"Jim Manly began to talk: 'I say, deacon, Darwin's theory of evolution is a little hard on the first chapter of Genesis. Of course we don't know how it will turn out, but it looks a little as though they were going to upset Moses.' The deacon made no answer. He surely must have heard Jim's remark. Presently he was observed to be counting his fingers slowly, and with a pause for thought between each enumeration. After a while Jim ventured to ask, 'Counting up your saw-logs, deacon, aren't you?' 'No,' said the deacon, 'I'll tell you. Your remark set me thinking. I was just counting up how many times in the course of human history somebody has upset Moses. First of all, two old jugglers named Jannes and Jambres undertook this,

but they failed. Then a certain king named Pharaoh went at the work of upsetting. He must have found it more of a work than he anticipated, for he has not reached home yet. Then three leaders of liberal thought—Korah, Dathan and Abiram—went at the job. They failed in the upsetting part, but they secured a bit of ranch for themselves, which they and their children have held in quiet possession until this day. Later on a king named Nebuchadnezzar entered upon the upsetting business. He did not succeed either. He spent seven years eating grass like a beast, and when he had served out his time he had changed his mind, and was a sadder and wiser man. His successor met with a still greater disaster, and in a similar attempt. Since that time there has been no end of persons who have tried to upset Moses. Some ancient heathen, Celsus and Porphyry and Julian the apostate, and latterly these German critics and scientists, so called, are at the same thing. Years ago, when I was in Boston, I heard of a meeting of free-thinkers at a place called Chapman Hall. I could not resist the temptation to go just once and hear what they said. I found about twenty persons there; three or four of them were women, all the rest men. And what do you suppose they were engaged in? The old enterprise of upsetting Moses. And yet Moses has to-day in the synagogues of Boston more people that preach him than ever before. It is astonishing how much upsetting it takes to upset Moses. It is like upsetting a granite cube. Turn it on which face you will, there it stands as solid as ever. The cube is used to being upset, and does not mind it. It always amuses me when I hear a fresh cry from some new quarter, averring that some man whom nobody has ever heard of has found out a sure way of doing what others have failed in. And now here comes Jim Manly, and Moses has to be upset again. Ah, well!' and the deacon sighed. There was a roar of laughter that made the rafters of the old saw-mill ring, and all joined in except Jim."

"BILL ARP," a Georgia humorist and also [mark, we do not say "likewise"] a Presbyterian elder, has been struck with the "evolution" wave now rolling over the Southern Presbyterian Church. He seemed a little dazed at first, but he gets well on

his feet before he ends his discourse. He regards the new doctrine as a happy solution of some puzzling problem: "But I think the new doctrine of evolution that has got into the church is a right fair compromise, for it maintains that while old father Adam evoluted and came from a monkey, old mother Eve didn't. She was made all of a sudden and all at once, pure and beautiful and lovely, and had no monkey ancestors, and I reckon that is the reason why woman is to this day so much better than man. There is no gorilla blood in her—no taint of the brute or the beast to crop out like it does in a man. What a pity that she was yoked on to such a fellow as Adam! What a splendid stock would have filled the world if Adam hadn't evoluted, and had been created fresh like Eve. As it is, we have got a sort of graded stock that is a sort of a cross between angels and monkeys, and it keeps up a powerful commotion. But the trouble about the whole business is that we can't help it, and what troubles me more than all is that I am one of 'em. I always knew there was some devilment in me, some original sin that made me meaner than I want to be, and now I know just where it comes from. That apple-eating business had nothing to do with it, but it is in the stock—the baboon cross—and ever and anon it crops out. All my good desires and noble aspirations, all my amiability and tenderness come from mother Eve, and my meanness from Adam. The old rascal! I wish she hadn't married him, and then maybe I would have been a better man."

UNFAITH.

Faith and unfaith can ne'er be equal powers.—*Tennyson.*

YE fools and blind! exalt your Christless creeds,
  Unflushed by vital fruit, or fragrant flower!
How can the sapless germs of barren seeds
  Bear sweetness, grace, or power?

And ye, who will not plant where Prayer's rich Nile
  Floods the soul's upland, but on desert slopes,
Look not to glorify the bounteous smile
  Of Heaven's high harvest-hopes!

Some grope in midnight, and still deem it morn—
  Bruising their brows on many a holy shrine,
And spill, in darkness of a maddening scorn,
  God's sacramental wine !

The world discordant rings with catch-word calls
  Of loud Unfaith, whose treacherous echoes start
Backward, to smite at vengeful intervals
  The rash blasphemer's heart !

Error and Pride go blundering hand in hand,
  To vex our souls with antique problems gray,
No son of earth was meant to understand
  This side the Judgment Day !

On dateless mysteries and supernal fates
  They spend the harshness of irreverent breath,
And fain would pluck, with zeal that desecrates,
  All veils from life or—death ?

Ah ! let me pass from turmoil to pure calm,
  Unscarred by passion and unquelled by pain—
Where Nature lays her cool magnetic palm
  On fevered pulse and brain—

Where Law and ancient Concord rule alone
  A realm unmarred by man's tempestuous vice,
Where Truths we know foreshadow the Unknown.
  And dream 'tis Paradise !

Behold the adorning Planets wheel in space,
  The undegenerate Seasons come and go,
While I in May-dawns see God's radiant face,
  And, when night winds are low,

Hear His still voice blend with the lute-like rill's,
  The rustling heath sedge and wave-murmurous lea,
To whisper strangely past the reverent hills.
  And die across the sea !

—*Paul Hamilton Hayne.*

OUR LETTER-BOOK.

TO THE objections offered by G. F. M. to Mr. Burroughs' thesis, that gentleman answers as follows:

"The motion of the earth on its axis, and the motion of the earth in its orbit, as they appear to man, are different manifestations of motion; otherwise he would not know that the earth has those two motions. One definition of motion is that it is a change of distance between either bodies or points. If infinite matter, *i. e.*, 'matter mathematically infinite,' consisted of an *absolutely* infinite number of impenetrable atoms as it *necessarily* would, how could there be a change of distance between atoms? How could there be motion? Suppose infinite matter to revolve on an axis, in that case, I grant that space previously unoccupied by matter would not be necessary to that one motion, and that no increase of space for that one motion would be needed; but, in my thesis I do not use the word motion in that way. I mean a *change of distance* between bodies, and how could that be, if infinite matter consisted of an *absolutely* infinite number of impenetrable atoms? How could there be changes of distances between many different bodies at the same time, as we note it in nature? If the number of atoms in the universe was *absolutely* infinite, such motion could not be; for matter is impenetrable; *e. g.*, 'a nail driven into a board does not penetrate the wood; it merely separates and displaces the particles' (Fleming). 'Atoms are the *ultimate particles* of matter' (Krauth). An atom does not and cannot penetrate an atom. Two atoms cannot occupy the same space at the same time. If the number of atoms was *absolutely* infinite, and, therefore, the sum of them occupied, *i. e.*, *absolutely* filled, all space, one atom could not be *sent* against another; one atom could not *displace* another; one atom could not *move* another; one atom could not *revolve on its axis*, for *cohesion* would prevent; one molecule could not revolve on its axis; no portion of infinite matter could revolve on its axis; one atom could not *change place* with another; each atom would of necessity be in a state of rest; and, hence, infinite matter would be in a state of rest. If matter was infinite, the earth, because of cohesion, could not revolve on its axis. Hence, the fact that a point on the earth's surface is farther from the sun at night than by day, is no argument to prove that there would be a change of dis-

tance, if matter was infinite. It is not assumed in my thesis, as G. F. M. suggests, that matter passes, *i. e.*, moves into space from beyond infinite space."

THE President of a Western University writes thus: "Have you a compassionate heart for an impecunious University which has a group of the *eagerest* readers you ever knew, and just the slenderest means of providing for them? And can you help us to get CHRISTIAN THOUGHT from the beginning?"

This appeal came to us at a moment when the funds of the Institute were running low. Nevertheless, we have sent the first volume and will send others, trusting that our readers will contribute a fund for colleges and clergymen of slender means who appreciate such literature as we furnish.

PROF. C. S. EBY, Tokio, Japan, has written: "My heart is with your work and I wish you Godspeed. I have the publications from the beginning and have freely used them. I send you to-day for the use of the Institute a volume of 'Christianity and Humanity' and two pamphlets, by which you will see that I am trying to '*storm the Fort*' in Japan. I wish some rich Christian would establish a Christian Institute in Japan, such as is referred to in the pamphlet on the Evangelization of Japan."

PROF. NOAH K. DAVIS, writing on another matter says: "The many signs of the prosperity of our 'Institute' which reach me are very gratifying, and CHRISTIAN THOUGHT is evidently taking its deserved place among the weighty periodicals of the time. With best wishes for its continued prosperity, and for your own personal welfare."

REV. DR. GEO. HUTCHINSON SMYTH: "It is an honor to be associated with such men in such a noble battle for the truth. I have been in the fullest accord with the Institute and meant long since to contribute, financially at least, to its work."

NOTATA.

THE FOURTH DIMENSION.—A point has no length, no breadth, no thickness. But if a point be moved a line will be made, and this line is the first dimension of space. If a line be moved it will produce a surface, and this surface is the second dimension of space. If a surface be moved there will be produced a cube or some polygonal figure—this is the third dimension of space. The fourth dimension of space has no real existence except in algebraic expression. It is an imaginary thing, as if one imagined any solid body carried through space just as the point or the line was carried. No attempt has been made to apply the idea to physics except by Sir William Thomson, who speaks of it in connection with molecular motion.

THE SCIENTIFIC SPIRIT.—"No amount of failure in the attempt to subject the world of sensible experience to a thorough-going system of conceptions, and to bring all *happenings* back to cases of immutably valid *law*, is able to shake our faith in the rightness of our principles. We hold fast to our demand that even the greatest apparent confusion must sooner or later solve itself in transparent formulas. We begin the work ever afresh, and refusing to believe that nature will permanently withhold the reward of our exertions, think rather that we have hitherto only failed to push them in the right direction. And all this pertinacity flows from a conviction that we *have no right* to renounce the fulfilment of our task. What, in short, sustains the courage of investigators is the force of obligation of an ethical idea." (Sigwart, "*Logik*," Bd. II., p. 23.) Is not this a true account of the spirit of science? Does it essentially differ from the spirit of religion? And is anyone entitled to say in advance that while the one form of faith shall be crowned with success, the other is certainly doomed to fall?

"RHYME AND REASON."—This alliterative phrase seems to have been first used by "holy George Herbert," in his poem each

stanza of which closes with "Or take me up to Thee;" the last stanza being this:

> " 'Come, dearest Lord, pass not this holy season,'
> My flesh and bones and joints do pray;
> And e'en my verse, when, by the rhyme and reason,
> The word is Stay, says ever, Come:
> O show Thyself to me,
> Or take me up to Thee."

IN his capital inaugural address a Professor in the University of the City of New York, Dr. MacCracken, made the following remarks as reported in the *University Quarterly:* "If I were asked how a few thousands of dollars each year can best serve Christianity here in the way of education, I could conscientiously say, by causing that it be used to imbue our future professional and cultivated minds with a sound Christian philosophy. I have met here in this immediate vicinity the Institute of Christian Philosophy presided over by a member of the Council of the University. *The lectures and magazines it gives each year are themselves almost a Faculty of Graduate Philosophy for the whole country.*"

IN his "Three Essays on Religion" John Stuart Mill uses the following language: "And whatever else may be taken away from us by rational criticism, Christ is still left; a unique figure, not more unlike all His precursors than all His followers, even those who had the direct benefit of His personal teaching" (p. 253). This is a striking and powerful testimony, by an extreme rationalist, to the unique character of Jesus Christ; the more striking that it comes at the end of a treatise in which he undertakes to show that natural theology indicates the existence of a Supreme Being not perfectly wise, all-powerful, or absolutely governed by benevolence. Denying that Jesus Christ is God, or ever claimed to be, Mr. Mill maintains that a reasonable, perhaps the most reasonable, way of accounting for His character is the faith which attributes to Him a divine inspiration and mission.

THE *ad-hominem* argument is always pertinent if not convincing. But we hardly imagined that a converted heathen would

use the authority of their own sacred oracles to persuade his countrymen of the truth of the doctrines of Christianity. And yet this is what Rev. Christine Mohun Banerjea, a Brahmin of the highest caste in India, has recently done. He was a pupil in Dr. Duff's school fifty years ago, and after his conversion aided greatly in procuring the edict of the government abolishing the cruel suttee. He has now delivered and published a lecture appealing to his educated countrymen in favor of Christianity and proving to them that their own ancient books, coeval with some of the Hebrew prophets, give distinct utterance to the fundamental doctrines of Scripture of incarnation and atonement through a Divine Saviour, while they are utterly silent as to those pillars of modern Hindooism, idolatry and caste. He impressively says, "If it were possible for those hoary Rishis (saints) to reappear in the world, they themselves would exhort you—nay, beseech you, implore you, perhaps constrain you—not to neglect so great a salvation." This appeal may have the more force as the Hindoos themselves are questioning the validity of their religion. Three hundred of their most learned pundits recently met in Calcutta to consider whether modern Hindooism is correct or not.

THE Rev. Charles Kingsley, a man of very broad and "liberal" views, wrote to a friend: "You are a sanguine man, my dear sir, who asked me to solve for you the riddle of existence, since the days of Job and Solomon, the days of Socrates and Buddha; the especial riddle, too, of our time, with its increased knowledge of physical science. But what I seem to know I will tell you. Knowing and believing a great deal of the advanced physical science of Darwin's school, I still can say I do not believe in the existence of law. 'Laws of nature,' 'laws impressed,' or 'properties impressed on matter,' are to me, after careful analysis of their meaning, mere jargon. Nothing exists but will. All physical laws and phenomena are but the manifestations of that Will—one orderly, utterly wise, utterly benevolent. In Him, 'the Father,' I can trust, in spite of the horrible thing I see, in spite of the fact that my own prayers are not answered. I believe that He makes all things work together for the good of the human

race, and of me, among the rest, as long as I obey His will. I believe that He will answer my prayer, not according to the letter, but according to the spirit of it; that if I desire good, I shall find good, though not the good which I longed for. And 'law' and 'necessity' I look upon as phantoms of my own imagination, always ready to reappear, but always certain, likewise, to vanish again, before one sound blow of careful logic or of practical life."

IN a late number of the *Homiletic Review* Prof. Stuckenberg has an excellent article on the "Current Religious Thought of Continental Europe," in the course of which he makes the following interesting statement: "There are living to-day in Berlin a daughter of Schleiermacher, a son of Schelling, and also one of Hegel. At the beginning of this century these names were among the most eminent in Germany, and their systems have exerted great influence on theological and philosophical thought. All three were charged with pantheism, and their teachings have frequently been used by professed disciples against evangelical doctrines. It is a significant sign of the times that the children referred to are all pronounced adherents of evangelical Christianity."

PROF. BARKER, in his address as President of the American Scientific Association, thus described (with seeming approval) the "true psychology" of Bain, Maudsley, Spencer, etc.: "Emotion, in this new science, is the sensibility of the vesicular neurine to ideas; memory, the registration of stimuli by nutrition. Reflection is the reflex action of the cells in their relation to the cerebral ganglia. Attention is the arrest of the transformation of energy for a moment. Ratiocination is the balancing of one energy against another. Will is the reaction of impressions outward. And so on through the list."

DR. LEIDY, President of the Philadelphia Academy of Sciences, recently said that in spite of the many reported discoveries of implements of human manufacture from the drift, and which were used as a claim to prove man's existence in the far-distant geologic ages, he had never seen any which he would consider undoubtedly genuine.

ABOUT BOOKS.

[In this department we shall make mention of recent publications, especially those in the line of our studies. There will not be space for extended review. The name of the book, its publisher, and its price when known, together with a brief statement of its drift will probably meet the demands of our readers.]

Messrs. Funk & Wagnalls have published the first volume of Dr. Pusey's "COMMENTARY ON THE MINOR PROPHETS." ($3.) In a combination of accurate scholarship, discriminating criticism, conservative orthodoxy, and spiritual devoutness, it surpasses all other commentaries on this portion of the Scripture known to us. Those preachers and laymen who do not know Hebrew have special need of the very fullest scholarship in this department, and scholars unite in paying deference to Dr. Pusey's knowledge of that sacred language, of which he was Professor at Oxford. While not afraid of the knottiest questions, he gives the result of scholarship rather than its processes; and while so full of learning, Dr. Pusey had that childlike spirit which the Master so highly commended. Let no one be scared by his name. The reader will not find a trace of what is *called* "Puseyism" in this first volume. "Puseyism" and "Dr. Pusey" were two very different things. One could love Pusey while detesting Puseyism.

Very remarkable is the book entitled "PARADISE FOUND: THE CRADLE OF THE HUMAN RACE AT THE NORTH POLE; a Study of the Prehistoric World." The preface says, it is not the work of a dreamer, nor of one fond of learned paradox; nor is it, as its name might indicate, a fable aimed at certain tendencies in modern science. It is a serious, remarkable effort to find a final solution of a question which has interested mankind in all ages. To this effort is brought the aid of scientific research up to date. Five years ago the book could not have been written. This fact illustrates its freshness. But its author must not expect his theory or his support of it to meet ready acceptance in scientific circles. Its author is William F. Warren, S.T.D., LL.D., President of Boston University. The letter-

press is assisted by several original illustrations. Boston: Houghton, Mifflin & Co. $2.

"THE PRAISE SONGS OF ISRAEL," is a new rendering of the Book of Psalms, by Prof. John DeWitt, of the Theological Seminary of New Brunswick, New Jersey. It has many excellences. It does not vary violently from the Revised Version nor from the Common Version. It is accurate; and its accuracy is an assistance to learned readers in getting at the exact meaning of the text. It is as good as a commentary. It is rhythmical. It is tasteful. It is the best English version of the Psalms extant. We had adopted it for use at family prayer before we learned that Prof. Thayer of Cambridge had done the same. We commend it heartily and are proud of it as a production of American scholarship. It is brought out beautifully by Messrs. Funk & Wagnalls. $1.50.

We have been desiring a compact and clear statement of the tenets of philosophers from the beginning of philosophical thought down to date. We have not known where to refer students who have asked for just such a book. At last we have found it. "PHILOSOPHIC THOUGHT IN ALL AGES," by Lawrence Sluter Benson, supplies the want. It is in 180 duodecimo pages. It begins with the earliest Grecian philosopher and comes down to Darwin. It gives the views of individuals and of schools compactly and intelligibly. It should be a manual in our schools and the first book in the hands of a student of the history of philosophy. The introduction is by the Rev. Dr. Crosby. It is published by the author. New York. $1.25.

We take in our hands a beautiful volume, so far as paper, typography, and binding can make it beautiful. The title is very lofty: "THE RELIGION OF PHILOSOPHY OR UNIFICATION OF KNOWLEDGE: a Comparison of the Chief Philosophical and Religious Systems of the World" together with three additional lines of title. It covers 566 pages. It is published by G. P. Putnam's Sons, N. Y. A more entirely worthless book we have not seen in five years. There is nothing original; what is selected is the least worthy of the original authors' writings. The temper

and sense of the author, who is named as Raymond S. Perrin, may be known from the ground taken in his introduction: "It is admitted, far and wide, and among its most devout followers, that it [Christianity] cannot sustain itself against the keen analysis of science or the commanding synthesis of history"! And this man talks of the "dense ignorance" of Jesus, and of the Christian Church "crumbling away under the weight of its venerable untruths," and of "mind as the product of speech" and other such crudities. The book is not even amusingly stupid or interestingly bad. It is simply worthless.

"THE LIFE OF JAMES CLERK MAXWELL, with Selections from his Correspondence and Occasional Writings," by Prof. Campbell and Principal Garnett, in a new edition, abridged and revised, has just been published by Macmillan & Co. London and New York. ($2.) Last year we made quite an effort to procure a Life of Clerk Maxwell, but it was out of print. We rejoice in this new memoir. It will make known one of the most remarkable and gifted men of this century. A man who, in the language of his biographer, enriched the inheritance left by Newton and consolidated the work of Faraday and impelled the mind of Cambridge to a fresh course of real investigation, ought to be known and remembered. In an early number we shall have more to say of Clerk Maxwell; in the meantime this charming biography should go into the library of all students of science and philosophy.

A man of remarkable gifts and graces, a philosopher and a preacher, was the Rev. Dr. Alexander G. Mercer, late Rector of Trinity Church, Newport, Rhode Island. Judicious selections from his sermons, under the title "BIBLE CHARACTERS," with a brief memoir of him by Mr. Manton Marble, is published by G. P. Putnam's Sons, with a portrait. We have found the book unusually suggestive.

Mr. J. Fitzgerald, 20 Lafayette Place, New York, has issued "THE CONFESSIONS OF ST. AUGUSTINE," as a specimen of the "Library of the Fathers of the Church," which he is publishing in good form. Price, 25 cents.